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INTERNATIONAL JOURNAL OF DRAVIDIAN LINGUISTICS

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The journal will be a biannual in English, to be published in the first week of January and June each year.

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The manuscripts of articles should be submitted in *triplicate*, clearly typed on one side only, double space with wide margins, **preferably on floppy or through e-mail** (dravling@md5.vsnl.net.in). Language data should be underlined with meanings in inverted commas. The systems of footnotes and listing of bibliography will be those adopted in *Language*. The article, if theoretically important, will be treated as in *Current Anthropology* and published with comments and replies. Fifty offprints will be issued free of cost to the author(s). Classical papers which are out-of-print will also be republished if there is a demand.

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THE 34th ALL INDIA CONFERENCE OF DRAVIDIAN LINGUISTS 2006: PRESIDENTIAL ADDRESS*

PUTHUSSERI RAMACHANDRAN

Distinguished Scholars and Friends

This is one of the happiest and proudest moments in my life. As I stand before this august audience, my memories go back 35 years to the 3rd day of June 1971, on which day a new academic baby was born in Thiruvananthapuram. This *Dravida sisu*, as Prof. V.I. Subramoniam happily pointed out in his welcome speech then, quoting the famous poem *Soundaryalahari* of Sri Sankara, spread a new cult of *bhakti* - the study of Dravidian linguistics, all over the Southern States and beyond. The birth of this child was well celebrated on the same day in a big way by honouring the grandfathers belonging to all the four branches of its family and above all a great grandfather - Dr. Sunitikumar Chatterjee, the doyen of Indian linguistics. Today, that child has become a full-grown youth of 35, capable of taking up any big mission in the field of scientific study of Dravidian culture and human behaviour. I am happy and proud in its tremendous achievements, as one of its founder-members, but feel sad that some of the founder-members and most of the elderly erudite scholars who promoted and patronized us, are no longer with us.

I cannot avoid some autobiographical reminiscences. Please permit me to take a trip down memory lane to the early 70-s when the seed of this prestigious formation was planted. Everything happens unexpectedly in life. Perhaps, this may be a general rule of nature. Never did I dream of undertaking research in linguistic science. My talent, as a poet, is to pluck the fragrant colourful flowers of the language and make garlands out of them, and not to examine the structure of sentences, putting them on the operation table of a linguistic laboratory to identify their phonemes, morphemes, morpho-phonemics and syntax. Since my first love was literature, soon after taking my Master's Degree in Malayalam, I registered

* 34th A.I.C.D.L. held at I.S.D.L., Thiruvananthapuram from 22nd to 24th June 2006.

as a research student in the erstwhile Travancore University to work on *The Influence of Kalidasa on Malayalam Literature with Special Reference to the Works of Kumaranasan*, under the guidance of Prof. N. Gopala Pillai, the then-Principal of Government Sanskrit College, Trivandrum. Since I got an appointment as lecturer in S.N. College, Quilon, I could not continue my research then. I then had an opportunity to attend the first Summer School of Linguistics in April-May 1965 in the Department of Linguistics under the able directorship of Prof. V.I. Subramoniam (V.I.S.). I had already attained a degree of mastery over Sanskrit and Panini's grammar. One day when Prof. V.I.S. was lecturing on Panini in the general linguistics class, I raised a doubt about some point which caught his attention. On the final day, when I went to his office to collect my merit scholarship and certificate of participation, to my pleasant surprise, Prof. V.I.S. induced me to take up research in linguistics. After a minute's thought, I promptly agreed and then and there itself I filled in the necessary forms. A couple of months later, learning from *The Hindu* that I was awarded a U.G.C. fellowship, I began my studies as a full-time researcher in earnest under his guidance.

The period I spent in the Tamil department under the supervision of Prof. V.I.S. and in the rewarding company of other scholars in Tamil, poring over dusty old books and burning the midnight oil, is still fresh in my memory. My association with Tamil scholars not only enabled me to become proficient in the language but it also emboldened me to translate Tamil poems into Malayalam. Now I realize that it was my great fortune to have received the affectionate care of the eldest grandmother in the Dravidian family. Though I had to return to S.N. College to take up my new assignment as Professor and Head of the Department of Indian Languages, Prof. V.I.S.'s persistent encouragement and prodding enabled me to complete my research. When I gave up my headship in the college to join the Malayalam department of the University of Kerala as a lecturer, Prof. V.I.S. was the happiest person.

When the next summer school was convened by Prof. V.I.S. as the director in 1971, he nominated me as a member of the faculty of teachers to represent Malayalam along with very senior scholars from other languages of various universities. I felt then that an interstate association and an institute for Dravidian linguistic research would considerably expand the horizon of literary studies and the scope for comparative studies would be considerably widened. In my excitement, I could not get a wink of sleep throughout that night. The next morning I unfolded my plan before Prof. V.I.S. The initial response from him was not favourable. The anti-Hindi

agitation and the disintegrated connotations of the term Dravidian had considerably annoyed the Union Government circles. Therefore, his reluctance was not without justification. Fortunately or unfortunately, we cannot change the name *Dravida* which identifies our family of languages. The linguistic *Dravida* does not carry the same meaning as the political *Dravida*. Finally Prof. V.I.S. decided to form an All India Association of Dravidian Linguists to found a research establishment and as a preliminary step he convened a three-day conference with myself as Organising Secretary. The result of the conference was the formation of the Dravidian Linguistics Association of India which got registered that year (1971). Several annual conferences were conducted in different universities of South India and Delhi. Savants like Prof. Suniti Kumar Chatterjee of Kolkata University, Prof. T.P. Meenakshi Sundaram of Madurai University, Prof. G.J. Somayaji of Andhra, Dr. Sooranattu Kunjan Pillai of Kerala, etc. were previous Presidents of the association.

This is the 36th year of the Dravidian Linguistics Association of India and the 30th year of the establishment of the International School of Dravidian Linguistics. When the Institute was inaugurated by Sri. C. Achutha Menon, the then-Chief Minister of Kerala, on 12th February 1977, in our first building named after Kerala Panini, at Trivandrum, we declared our objectives in the form of ten commandments for the future functioning of the Institute. They are:

1. To undertake, organize and guide original works in Dravidian studies and advanced research in the areas which form an integral part of language and culture, way of life and thought.
2. To impart training to those who live within India and abroad, interested in Dravidian languages, thought and culture.
3. To initiate advanced studies and researches in all aspects of Dravidian languages, art, architecture, history, philosophy, culture, religion and tribal culture, etc.
4. To translate books from other languages into Dravidian languages and vice-versa, especially in grammar.
5. Compilation of expressions, colloquial terms, mutual borrowings, specialized words in history, business and commerce with adequate meaning and explanation for the benefit of the common man.

6. To strive for pooling together the research findings in various universities and institutions in India and abroad for the benefit of the public and research scholars.
7. To collaborate with academic and scholarly institutions and government bodies for the dissemination of knowledge.
8. To establish a modern library with all facilities like computerization, internet and infrastructure to preserve ancient manuscripts, microfilming and providing cold storage rooms.
9. To establish museums of antiquities and tribal museums to preserve ancient artefacts for posterity.
10. To issue publications, with DTP facility and providing an offset printing unit solely for I.S.D.L. publications.

The D.L.A. and I.S.D.L. have fulfilled most of the dreams and are fortunate in that most of the advances in Linguistics and its vaster applications have already been spearheaded by the greatest visionary Dravidian linguistics has ever seen - Prof. V.I. Subramoniam. Soon after the formation of the Institute, he initiated the cognate method of teaching languages, thus pioneering a branch of applied linguistics. The holistic study of Dravidian tribal cultures and languages was another landmark. He pioneered neurolinguistic and psycholinguistic applications. and emphasized the role of the brain and its processes in the formation of languages. It was only since about 1990 that the interconnections among human genetic influences have become the subject of worldwide studies (*Genes, Mind and Culture: The Co-evolutionary Process*. Lumsden, Charles J. & Wilson, Edward O. 2005; *The History and Geography of the Human Genes*. Cavalli-Sforza, Menozzi & Piazza, 1994). The human genome has been mapped, but no unique genetic causation has yet been identified, though the coherence of genetic and cultural traits remains intriguing.

It is this extended milieu that faces the D.L.A. and I.S.D.L. now. The pioneering spearheads already established by its greatest leader indicate the need and directions of the new thrusts. The I.S.D.L. already had useful interactions with N.I.M.S., Bangalore on the study of the language of the brain. These have been mainly in the area of deficiencies in brain-functioning. We have to enter into the almost unexplored area of the developmental and functional roles of the brain's processing of languages.

Language is the most important feature in the determination of similarities and differences in cognition among humans and other life forms. This is an area in which Prof. V.I.S. initiated a dialogue with veterans in the field in Kolkata a few years ago. We need to carry that forward.

We have already advanced considerably in automatic translation of languages and voicing of the Braille script. Vast progress has been made elsewhere and we have to do more to keep up our initiatives.

I.S.D.L. is now no longer a geographically isolated island of intellectual endeavour. The Apparel Park across the road uses advanced technologies and IT-enabled services of world standard. The Marion Engineering College is now a centre of academic activities. Above all, Technopark opens out wider windows to the entire world. We have to utilize the facilities and explore new interfaces between language and life as extended by modern technology.

These vistas pose organizational challenges for the D.L.A. and I.S.D.L. We have to explore the possibilities for raising the I.S.D.L. to a Deemed University.

We also have to do a lot in other areas of applied linguistics. The role of applied linguistics in teaching of languages is very important. We have observed this in our reports. The formation of the States in the Indian Union based on languages has left the problems of language minorities still unresolved. Kerala has got about seven lakhs of Tamils, Kannadigas, Telugus, Tulus and Konkanites. Similarly, Tamil Nadu has Telugu, Kannada, Malayalam and Urdu minorities in greater numbers. Andhra Pradesh has Tamil, Kannada, Malayalam, Marathi, Urdu and other minorities in considerable numbers. Karnataka has Tamil, Marathi, Malayalam, Konkani and Tulu minorities whose number is very significant. A considerable segment of tribal population found in the four Southern States has recently clamoured for education of its children in the primary level in their mother tongues. To compel them to learn regional languages, neglecting the study of their mother tongues will create bitterness. A disgruntled minority is a danger to the cohesion of the State and has caused, not infrequently, strain in the friendly relations with neighbouring States. A solution of bilingual education followed in erstwhile U.S.S.R., Australia and now in U.S.A., combining it with the cognate method developed in Kerala and other methods tried in other parts of the country will be a solution in selecting the languages as a medium of teaching. The problem in Sri Lanka

is more acute. In Malaysia and Singapore also, a similar situation exists. Simplified teaching of languages with specially prepared textbooks and with the aids of machines like the language laboratory will have practical utility for the governments in India and other nations.

The existing educational pattern of teaching languages is very costly and time-consuming. Teaching of regional languages, Hindi and English occupy one-third of the teaching time. Out of fifteen years of study for graduation, over five years are spent on the study of languages alone. The method of teaching languages in India is outmoded, resulting in a large number of failures and in low achievements. The annual expenditure in governments in the Centre and States will amount to about Rs. 2,500 crores. One-third of teaching time can be saved by improving teaching methods and by adopting improved methods resulting in annual savings of Rs. 800 crores. This amount can be made available to fund research proposals. Our faculty of applied linguistics will have to be active in this field.

Tribal Studies

Another neglected field is the study of Dravidian tribal societies. A recent analysis of census figures of India has shown that nearly 70% of tribal population - speaking one or the other Dravidian language - is found in the Northern States of India, like Gujarat, Maharashtra, Madhya Pradesh, Orissa, Bihar and West Bengal, which form the outer Aryan group. The wider spread of Dravidian languages covers Nepal, Pakistan, Afghanistan and Iran. The population of Dravidian tribes is steadily decreasing and, in one or two cases, they have completely switched over to the majority language. For example, the Dravidian tribe Cheros of Bihar now speaks Hindi. Linguistic archaeology has shown that wider spread and contact of Dravidian with Finno-Ugrics, Elamites, Sumerians and the African and Australian language is a plausible theory. A description of these societies in order to correlate them with linguistic evidences is a crying need. The study of recent migrants in Myanmar, Malaysia, Singapore, Sri Lanka, Mauritius, Fiji, the Middle East and South Africa, and the analysis, especially of their convergence and identity, is a long-felt need. It is useful for foreign relations. We can be proud that we have published a three volume *Encyclopaedia of Dravidian Tribes*, ably edited by Sri. T. Madhava Menon I.A.S. (Retd.). This is a landmark in the tribal studies of India. Before the publication of these volumes, we published a big three-volume *Dravidian Encyclopaedia*, edited by Prof. V.I. Subramoniam. There are other valuable publications also we had, on Jainism, etc. The Institution has proved its

competency to undertake any major work in the field of linguistic and cultural studies.

Project Proposal for a New Linguistic Survey

It is high time for a new scientific linguistic survey of India. A preliminary project for it is to be made immediately and submitted to the Government of India and for which a seminar is to be called for. It is impossible without getting the services of a batch of trained linguists, sociologists and anthropologists. It was in 1927 that the first linguistic survey of India was conducted, by Sir Grierson. The survey did serve a very useful purpose. It was a storehouse of information available then and gave impetus to scholars in the field of linguistic study. However now it has become hopelessly out of date and the report is not even available. A large number of new dialects have been noted, discussed and recorded. Moreover it was a project planned and executed by a Government agency whose purpose was not to record and study the language and culture thoroughly. The persons entrusted with the work of collecting data and processing them were not academically trained. It was not possible at that time to get scientifically trained linguists. Therefore, quite a number of generalisations drawn by them could not stand the test of scientific methodology. The status of linguistic studies in India at that time was quite different from what it is now. Competent linguists, well trained in phonetics and dialectology, were not available then. In spite of all those drawbacks, it was a monumental work and contributed very much to the development of linguistic studies in India. However during the last eight years, vast changes have taken place in the linguistic scenario in India, which demand a new survey.

Punjab University at Patiala took the initiative in this direction a few years ago. They undertook a survey of the Punjab area under the efficient leadership of Dr. H.S. Gill in 1968. The project was supported by the All India Linguistic Seminar held at Punjab University on 9th and 10th July 1968, under the Presidentship of Prof. P.B. Pandit of Delhi University.

I.S.D.L. and D.L.A. will have to think of conducting a seminar on a new linguistic survey of the Indian subcontinent, which has become an urgent necessity both for scholarly and practical purposes. It is also clear that such a survey can be conducted fruitfully only under academic auspices. We have got sufficient number of well-trained linguists as members of D.L.A. and I.S.D.L. I do not find any other institution which could undertake such a big project. The seminar can endorse the Director's

idea of prefacing the main survey by a pilot survey in order to establish the broad dialect areas and to determine the features of linguistic behaviour and socio-cultural setting that may usefully be selected for establishing isoglosses as they had done in Punjab. The main survey can then be undertaken for both types of study - extensive mappings of some limited tribes or intensive studies of selected speech forms in formulating hypotheses to be tested in the pilot survey. Full use should be made of the diachronic facts of the language of the area.

In order to do full justice to the socio-cultural setting, we may urge close collaboration between the linguists, social anthropologists and sociologists who have studied the area well. Thus the seminar should be a joint seminar of persons in these three areas. We can take up the linguistic survey of the four Southern States as the first step, and a proposal for the survey can be submitted to the Government of India as well as to the State governments. Later, we can take up the Northern States where a number of Dravidian tribes are living scattered.

Study of Inscriptions

Another neglected area of study is the field of inscriptions. We have to set our hands together at once for collecting, editing and publishing early inscriptions of the four major languages in the South. Inscriptions are the only early records of languages. South India is very rich in inscriptions - both copper plate and stone. The Archaeological Survey of India, the departments of State Archaeology and the Epigraphic Society of South India have collected thousands of inscriptions and published them annually. The materials in this field are scattered in several volumes. The selection, collection and edition of these early records, arranged chronologically, is a hard work. It requires sufficient knowledge of epigraphy to read the early scripts like *Asokabrahmi*, *Dakhini*, *Vattezhuthu*, etc.

Before temples were constructed with hard stone blocks, donations to temples were inscribed in copper plates. Thousands of stone inscriptions, valuable for the study of language, history, culture and evolution of scripts, are not properly preserved in most of the early temples of India. Tiruchirappalli district, especially Pudukkottai and Kulathur taluks, have a number of inscriptions in the temples of Thiru Gokarnam, Kudumiya Malai, Narttamalai, Amma Sathram, Sithanna Vasal, including the famous rock-cut cave Temple of Tiruchirappalli. Among the donors are Mahendravarman, the Pallava king and the kings of Pandya and Chola

dynasties like Maran Jatayan, Parakesarivarman, Paranthakan, Rajarajan, Rajakesari Varman, Kulottunga Cholan, Rajarajan and a later donor - Thondaman Ramachandran of 1866. The temple authorities have not taken care in the preservation of these inscriptions properly. Some of the inscriptions are highly poetic. There are eight excellent *slokas*, written by Mahendravarman, in the rock-cut temple at Tiruchirappalli, in praise of Lord Siva. One of the *slokas* states that Lord Siva is afraid of casting his eyes on Kaveri because of the fear of Gangadevi, who is watching him, always on his head.

As many as 1,060 inscriptions are found engraved on the walls of the temples under the management of Tirupati Devasthanam itself. Of them, 640 belong to Venkateswara temple - Tirumala, 340 to Govindaraja temple - Tirupati, and the rest 80 belong to other temples. Except for a few, almost all epigraphs of Tirupati temple are in Tamil language and in alphabets interspaced with grantha characters. Only 50 inscriptions are in Telugu and Kannada. It shows the tremendous impact of Tamil language in the area of Tirupati Devasthanam in Andhra Pradesh, by the religious activities of the Alvars of Tamil Nadu. The earliest stone inscription of the temple goes back to A.D. 83, to the 55th year of the reign of King Vijayadanti Vikrama Varma of Pallava dynasty.

Under the patronage of almost all the important dynasties of South India, the sacred temple of Tirumala enjoyed full benefits and glories. The Pallavas, Cholas, Pandyas, Kadavarayas, Yadavarayas, Telugu Cholas, Telugu Pallavas, Vijayanagara kings (Sangama, Saluva, Tuluva) have left the marks of their patronage and endowments on the walls of the temples of Tirumala and Tirupati. In addition to the epigraphical lore of the temple, there is a unique collection of about 3,000 copper plates on which Telugu *sankeertanas* of Thallappaga Annamacharya and his descendents are inscribed. This huge collection forms valuable source material for historical linguists in Telugu, apart from its importance to musicologists. We have to collect, edit and publish all the inscriptions of South Indian languages chronologically in separate volumes. I assure from my own experience that it will be highly rewarding; when I published a bunch of *Vattezhuthu* inscriptions of Kerala for the first time in 1985, that inspired a number of further studies in Malayalam.

Rediscover and reread old materials

The discovery of materials hidden in the caves of time and rereading of ancient texts in the light of modern theories are highly necessary. There

are some established theories on Dravidian languages which are to be re-examined.

Even before the advent of foreign scholars, some of our traditional grammarians tried to identify the group of languages of Dravidian origin. It was the author of *Leelatilakam* of 14th century A.D., the first native comparitivist of Dravidian languages, who made some observations on Dravidian languages. His first statement was that the people of Kerala are *Dramidas*, hence their language is called Tamil. To him it is an *Apabhramsa* 'corrupted' form of *Dramida*. According to him, Tamil is a corrupted form of *Dramida* because he is of opinion that Sanskrit is *anadi* 'beginning-less' and other languages are derived from it. His observations on dialects of Tamil are important. Further, he says that it is well known that the Cholas, Keralas and Pandyas are *Dramidas* and they have their own dialects. However, he refuses to accept Kannadigas and Andhras as *Dramidas* stating that their languages are different from the language of Tiruvaymozhi of Nammalvar, which is known as *Dramida Veda*. *Keeralaanaam dramidasabda vaacyatvaad apabhramseena tadbhaasa tamil ityucyatee. Coola keerala paandyeesu dramidasabdasya vaa prasidhyaa pravrttih. Karnaatakaah Andhraah api dramidaa iti kecit tad na. Nyaksena dramidavedavilaksanaabhaavatvaat. Dramida-sanghaata paathaabhaavaacca. Dramidaveda iti coolaadibhirabhinandyamaanah kascit bhaasaaprabandha-visesah. Yaduktam: Sahasrasaakhaam yoo adraaksit Dramidiim Brahma Sammitaam.* He has another point in his argument for establishing the Keralites as *Dramidas* or Tamilians, because there are sayings like *tamil nattu mooventharam vanthaar*, 'the three kings of Tamil Nadu - Chera (Kerala), Chola and Pandya - came'. Here he is quoting Ilampuranar's commentary on the 25th *sutra* of *Tolkappiyam Colladhikaram*. He further says, while agreeing Keralites are Tamilians, there are differences in their languages. Though his arguments are not perfect and scientific, there is an ardent desire in him for the comparative study of Dravidian languages.

F.W. Ellis - The First Comparitivist in Dravidian

All the vernacular languages of India were badly neglected by the British rule. Apart from English, the only Indian language which was given importance in the educational curriculum was Sanskrit. It was Francis W. Ellis, an officer in the civil service of East India Company, an erudite scholar in Sanskrit, who noticed first the importance of South Indian languages and took up the burden of their study in depth. Thus three centuries after *Leelatilakam*, we have got a scientific study for the first time in comparative Dravidian from an English civil-service man.

Ellis is the first comparative and historical linguist so far known to us, but the scholarly world neglected him believing that Mr. Bopp, the author of *Conjugations System*, is the pioneer in comparative philology, and Bishop Caldwell the first comparative Dravidologist. It could not have been so. Now we have got ample evidence to establish that Ellis was the pathfinder in the field of comparative Dravidian linguistics. We have got at least two dissertations written by him - an essay on Telugu language and another on Malayalam. The first was written in 1815, the year of the births of Bishop Caldwell and Hermann Gundert. Though he has not called the group of languages of South India by the name Dravidian, he was the first scholar to state that this group of South Indian languages belongs to a separate family. He proved his theory by writing four essays - one each on Telugu, Tamil, Kannada and Malayalam. However, only two have been preserved for posterity. In his article on Telugu language, published by A.D. Campbell, in his *Grammar of Telugu Language*, Ellis observes: "The high and low Tamil, the Telugu, grammatical and vulgar Carnatica of Cannadi ancient and modern, Malayalma, the Thulua, Kodagu and the language of the mountaineers of Rajmahal were genetically related and constituted an independent family". He categorically stated and proved through his writings that neither Tamil, Telugu nor any of their cognate dialects are derivations from Sanskrit. The latter, however, may contribute to their polish, and is not necessary for their existence, and they formed a distinct family of languages with which Sanskrit, as in later times especially, intermingled, but with which it has no radical connection. This is a very important statement in the history of Dravidian linguistics. The story of the dissertation on Malayalam is interesting. It would have been lost unless Sir Walter Elliot discovered the proof-sheets of this treatise, after the author's death, among some papers brought to him from Madras along with books of the College of Fort St. George, where Mr. Ellis was the Principal. He, being an officer in the civil service of East India Company, worked as the Principal of the College of Fort St. George till his death in 1819. Arriving in India as a young civilian in 1796, he devoted himself to the study of languages, history and antiquities of South India. For 20 years, he devoted all his spare time to the cultivation of Sanskrit and various dialects peculiar to South India. Having determined to publish nothing until he had exhausted every available source of information, he had amassed a vast amount of material, the elaboration of which would have shed a flood of light on the still obscure history of South India and likewise anticipated much of the knowledge of its philology and literature which recent researches have brought to light. During a short excursion to Ramnad, he accidentally swallowed some poison and died on 10th March 1819. No one was at hand who understood or cared for his pursuit. All his papers were

lost or destroyed. After glancing through these two available dissertations which were written before 1815, I am convinced that Mr. Ellis is the pathfinding scholar in the field of scientific research on comparative and historical Dravidian studies. I am very sorry that scholars of Dravidology could not make any mention of this erudite historian and comparitivist in the context of Dravidian studies. We have to establish his memory by publishing his contributions to Dravidology, in a single volume, including his partial translations of *Tirukkural* and *Naaladiyar*.

A word on our Campus

When we started the functioning of the D.L.A. in 1971 and later the I.S.D.L., there were only a few institutes and departments devoted to the study of Dravidian linguistics in South India. Now the situation has changed drastically. There are four universities solely devoted to the study of languages of the south: Tamil University in Tanjavur, Telugu University in Hyderabad, Kannada University in Hampi and after all these, the Dravidian University at Kuppam of which the first and last were founded and headed by Prof. V.I. Subramoniam. The only State left without having a language university is Kerala. To compensate this, Kerala got the fortune of hosting the prestigious International School of Dravidian Linguistics. Twenty years ago, in 1986, when we started the functioning of this Institute in its present campus at Menamkulam, near the seashore and the famous V.S.S.C. at Thumba, shifting from the city, the place looked like a desert, barren with white sand all around, and with a hostile climate. With the untiring efforts of the founder of our Institute, Prof. V.I.S., and a team of workers led by him, the campus, extending to 27 acres of land, now has flourishing green vegetation. In this extensive site grow 2,735 trees including coconut, cashew, mango, neem, acacia and casuarinas in between the various buildings. Now the campus has got the look of a forest or the aranyakas of ancient rishis, a pleasant place, congenial and comfortable for staying, conducting research and imparting instructions. There are 14 big buildings with a total built-up area of 40,500 sq.ft. housing various faculties, the administrative office, guest-rooms, museums, libraries, laboratories, canteen, etc. Each building is named after the savants in the field of Dravidology like Tolkappiyar, Kesiraja, Nannayya Bhatta, Vemana, Kerala Panini, Rabindranath Tagore, Anantharangan Pillai etc., likewise the museums, after Hermann Gundert and L.V. Ramaswamy Iyer, to cherish the memories of their great contributions to posterity. One building bears the name of C. Achutha Menon, the former Chief Minister of Kerala, who patronized and encouraged the activities of the D.L.A. from the very beginning, and inaugurated the I.S.D.L.

It is the 80th birthday of the Founder-Director of the I.S.D.L. and the Founder-Secretary of the D.L.A. Hence, it is our duty to honour him in a befitting manner. I would like to make two suggestions on this occasion: 1. All his monographs and research papers lying scattered in several journals of India and abroad be collected, edited and published in one or two volumes soon; 2. The building, housing the I.S.D.L. may be named after him. I also take this opportunity to place on record our love and gratitude to Prof. V.I.S., the untiring preceptor and master-builder. We pray for his healthy long life and hope that he will continue as our leading light for years to come.

In summing up my speech, I request that the functioning of the I.S.D.L. be elaborated, by formulating new courses in cultural studies. Nowadays, most of the departments of languages and literature in the West are expanding as departments of cultural studies, taking up interdisciplinary courses with archaeology, anthropology, sociology, history, epigraphy, numismatics, etc. The study of Linguistics has pragmatic value. As with scientists engaged in various specialities, the aim of linguists should not be merely to understand the behavioural patterns of man and the universe, but more significantly to apply their experiences and knowledge in solving the difficult problems that man faces and to help him in living more conveniently and happily.

ENCYCLOPAEDIA OF DRAVIDIAN TRIBES (3 Volumes)

T. Madhava Menon (Ed.), HB, Demy 1/4, Rs. 2780/- (US\$ 300/-)

[Vol. I: 1996, pp. xx+405; Vol. II: 1996, pp. xii+393; Vol. III: 1997, pp. xii+347]

Volume I: A thematic introduction arranged in a series of articles on physical anthropology, history, geography & environment, material culture, social organization, religion, life cycle rituals etc.

Volume II: Contains ethnographical reports on the tribal communities in Kerala, Karnataka, Tamil Nadu and some tribal communities of Andhra Pradesh. Articles on the languages spoken by some of these communities have also been featured.

Volume III: Contains articles on Dravidian tribes living in the cis-Vindhyan area and north of it. The major tribes described are the Brahui, Gonds, Abujh Maria, Bison Horn Maria, Muria, Maria, Kondh and Oraon.

A HANDBOOK OF WEST BENGAL (2 volumes)

Sanghamitra Saha (Ed.), HB, Demy 1/4, Rs. 1,750/- (US\$ 226/-)

[Vol. I: 1998, pp. x+459; Vol. II: 1999, pp. xi+433]

Volume I: This volume deals with the background of the study, land and population, history, religion, folk culture and social life of the people of West Bengal. It covers both western and eastern regions of Bengal. This thematically-arranged information-packed volume is well-documented.

Volume II: This volume has 10 chapters: Economy, Language and Literature, Educational System, Art, Media, Intellectual Achievements, Administration, Cultural Contact, Important Personalities and Places of Interest. Of them, some are fascinating, like the last one that brings before the readers a panoramic view of the different places and their natural environs. Similarly, the chapter on cultural contact covers the relation between Bengal and her neighbours, as well as the distant South, in a picturesque description.

Moderately priced, both volumes have many pictures. A comprehensive index covering the 2 volumes is given for ready reference.

A DESCRIPTIVE ANALYSIS OF A DIALECT OF TAMIL

V.I. Subramoniam, 2003, HB, Demy 1/8, pp. xiv+85, Rs. 170/- (US\$ 17/-)

The thesis used only by researchers in the Kerala University and later in the International School of Dravidian Linguistics, has come out now in attractive format. When voicing of the written script is now attempted in several centres, its acoustic study helps to voice the Tamil sounds. A pathfinding thesis completed in 1957.

A GRAMMAR OF TULU (A DRAVIDIAN LANGUAGE)

S.L. Bhatt, 2005, Demy 1/8, pp. x+388, Rs. 200/- (US\$ 40/-)

An exhaustive study of the Tulu language submitted by Dr. Sooda Lekshminarayana Bhatt as a Ph.D. thesis to Wisconsin University, U.S.A., this book has an introduction, the locality of Tulu, its relationship with the other languages, phonology, morphology and syntax. One noteworthy feature of the book is the lexicon containing arrangement and pronunciation, grammatical categories, derivations, Tulu words and idioms, etc. This well-printed publication will be an asset to language students and Tulu scholars.

LANGUAGE SAMPLING IN KANNADA: CLINICAL CHALLENGES AND POTENTIAL

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Abstract

Lack of both formal language tests and normative data on Kannada, a Dravidian language spoken in South India, hinders early identification of paediatric language disorders in the Kannada-speaking population. A heavily multilingual, multidialectal environment poses further challenges for language assessment. In this preliminary study, data from 5 normally developing children and 4 adolescents with mental retardation were collected and analyzed, to explore the potential of language sample analysis as a clinical tool for Kannada. Transcripts were analyzed for presence of morphological, semantic and pragmatic errors. Mean length of utterance in morphemes was also calculated. Results suggest that morphological use is early and relatively error-free among young children learning Kannada. While a similar number of morphological errors was made by children with typical development and the adolescents with mental retardation, errors made by the former involved omission of obligatory morphemes, while the latter produced incorrect morphemes. The potential for language sampling to assist in early identification of language disorders is discussed, as well as barriers to its use.

Keywords: Kannada, multilingual, multidialectal, language sample analysis, language development, language disorders

The precise number of languages in the world is unknown. Many of these languages are little described and some are dying out as communities succumb to the pressures of modernity (Mehrotra, 1999; Summer Institute of Linguistics, 2004). Other languages are well-described and have large numbers of native speakers, but are lacking in psycholinguistic research, such as basic information on typical child language development. Such information forms the basis for contemporary clinical practice in paediatric language disorders. Even in societies where the practice of speech pathology is relatively advanced, the lack of this basic information remains an obstacle.

India is one such multilingual society, which is fortunate to have several large training centres for speech language pathology. Among developing nations, India is relatively advanced in its clinical training, but is lacking in detailed descriptive information about normal development for many languages. Even among well-described languages spoken by millions, there is a paucity of basic information on language development. There is developmental work on a few North Indian Indo-Iranian languages (Shukla and Mohanty, 1986; Misra and Misra, 1993), and some papers on Tamil (Vaidyanathan, 1987; Raghavendra and Leonard, 1988), among the Southern Dravidian languages. There has been very little work to date on the acquisition of Kannada, a Dravidian language of the state of Karnataka spoken by over 50 million people (Census of India, 2004). The need for information on normal language development in Kannada is clear: most current authorities subscribe to a descriptive developmental model, in which clinical practice in paediatric language uses information from normal development as a guide (Paul, 2001). Basic information on the sequence of language development is particularly crucial for the early identification of children with language disorders. The lack of information in Kannada and its four major sub-dialects poses a great challenge to clinicians working in this language, particularly with regard to preschool populations.

The purpose of this paper is to discuss the challenges that exist in attempting to use language sample analysis as a clinical tool with Kannada-speaking populations. In addition to the issues raised by lack of normative data, Kannada is also spoken in a heavily multilingual environment, which raises additional obstacles to the interpretation of language sample data. The lack of normative data is an obvious problem, one that exists even in relatively well-researched languages such as English, where the normative information that is available has significant weaknesses (see, e.g., Eisenberg, Fersko, & Lundgren, 2001). This lack is further exacerbated by the lack of consensus on appropriate methods for language assessment in heavily multilingual environments (see Müller, 2003, for a general discussion of the clinical issues raised by multilingualism). We illustrate our discussion of these issues with data collected from Kannada-speaking children who are speakers of a non-standard dialect.

Language in India

India has a pluralistic society with people from various linguistic and ethnic backgrounds. According to the 1991 census, there are 114 languages and 216 mother tongues (Census of India, 2004). Among the 114 languages,

18 are scheduled languages and 114 are non-scheduled languages. The term 'scheduled' refers to languages included in the eighth version of the Indian Constitution (Mallikarjun, 2001).

Indo-Aryan and Dravidian are the two major language families spoken in India. The Indo-Aryan languages are a sub-branch of Indo-Persian, and they are most widely spoken in Northern India. The Dravidian languages are spoken mostly in central and southern India. According to Steever (1998), the Dravidian language family has 23 languages, and about 220 million speakers, the majority of whom live in South Asia. The *Ethnologue* (Grimes & Grimes, 2004) web catalogue of world languages lists 75 Dravidian speech forms.

Kannada

Kannada is a southern branch of Dravidian, and it has four major dialectal areas, and about 44,000,000 speakers (Grimes & Grimes, 2004). The southern dialect, which is considered the mainstream dialect, is spoken in Bangalore and Mysore. The northern dialect is spoken in Dharwar, the western dialect is spoken in Mangalore and the north-eastern dialects are spoken in Bijapur. The north and north-eastern dialects are influenced by Marathi, an Indo-Aryan language spoken in the state of Maharashtra (Steever, 1998).

The formal style of Kannada is drawn from the written form of Kannada and has many lexical items borrowed from Sanskrit. There are different subcastes among Kannada speakers and these subcastes speak different dialects of Kannada. For example, for historical and religious reasons, Brahmins usually speak the more Sanskritised, formal style of Kannada, whereas other communities with less education or religious connection to Brahminical rites speak non-standard dialects. Many speakers of non-standard dialects are able to code-switch to use formal Kannada at times, during certain occasions such as public speaking or to enhance upward social mobility (McCormack, 1966).

In modern India, there are a number of forces promoting multilingualism among many segments of the population. In Karnataka, the state where Kannada is spoken, there exist large numbers of people from different regions of India. Karnataka is surrounded by states with different official languages, including Tamil Nadu (Tamil-speaking), Kerala (Malayalam-speaking), Maharashtra (Marathi-speaking) and Andhra

Pradesh (Telugu-speaking). The migration of people from neighbouring states can be dated back to the 17th and 18th centuries. A number of Marathas (people from the state of Maharashtra) settled in Karnataka during the 17th century. While other commonly spoken languages of the region are from the Dravidian language family, Marathi is an Indo-Aryan language. Hyder Ali, a ruler of Mysore in the mid-18th century, encouraged a number of gardeners called the 'Tigalas' to migrate from Tamil Nadu to Karnataka. A number of tradesmen and plantation workers from Kerala and Tamil Nadu have migrated to Mysore, Bangalore and other parts of Karnataka for jobs. All these historical reasons have resulted in multilingualism in the state of Karnataka (Kamath, 1980).

Dealing with multilingualism is particularly challenging when many dialects that are spoken do not have official recognition. There are educational ramifications when a gap exists between home and school dialects. Literacy instruction is conducted in standard Kannada. Children whose home dialect is non-standard must become bidialectal to succeed in school.

In addition to dialect differences, it is not uncommon for Kannada-speaking children to learn a second language from their peers and neighbours, when they form close relationships with people from a different region. Hindi, the national language of India, is also learned by many children because of their exposure to Hindi movies and Hindi television programs. Hindi is also encouraged in school, and children may take Hindi as an elective subject. Most middle class and upper middle class families send their children to English medium schools, where the children learn to speak and to read and write in English. Such children may have little instruction in Kannada itself, spending their days in an English-speaking environment and taking Hindi as a foreign language. Thus, Kannada-speaking children are often bilingual or bidialectal, and many speak three or more languages. In this multilingual environment, borrowing from one language into another is common, and words from such other languages as Hindi and English are in frequent use by these children. Hence it may be rare for children to speak a 'pure' form of Kannada. Facility in code switching is a crucial skill for children in most Indian contexts--virtually no educated adult in India is monolingual.

In urban areas, even many children who are brought up in a monolingual home environment may be exposed to a second language from their peers, from the media, or upon school entry. Thus children in the

Indian context may experience either sequential or simultaneous bilingual (or multilingual) learning contexts, and many will experience both, depending on their family language background. In the case of Kannada-speaking children living in urban areas, it would be common for children to be exposed to English, Hindi and the Dravidian languages of neighbouring states such as Telugu, Tamil, Malayalam, depending on their family circumstances. Rural children's experience is likely to be less multilingual, however children from middle class families will virtually always know at least some English and be expected to go to an English-medium school. When children of lower-income families whose native language is one of the non-standard dialects of Kannada attend school, they are exposed to standard Kannada, thus resulting in bidialectalism.

In developing appropriate measures of child language development in an Indian context, the multilingual learning environment must be taken into account. Assessing children from multilingual environments poses special challenges, and in order to correctly interpret language data, a familiarity with bilingualism and bilingual acquisition is imperative. In the USA, there has been a tendency for clinicians unfamiliar with bilingual acquisition to regard it as an obstacle for children with developmental delays and impairments. Some clinicians discourage bilingual environments for such children, arguing that the presence of more than one language may cause linguistic confusion and thereby lead to further delays. Whether monolingualism promotes speed of acquisition is a matter of debate. According to a review of the literature by Romaine (1999), during the first half of the 20th century it was believed that bilingualism hinders cognitive development. More recent studies have shown that bilingual children may show linguistic advantages. For example, they may have more metalinguistic awareness than their monolingual peers (Bialystok, 1997). Cognitive advantages have also been reported (Bialystok, 1999). It is not clear that these advantages apply to all bilingual children - for example, some may have restricted exposure to one or both of the languages, and may have reduced opportunities for language learning as a result.

What is clear is that in India a monolingual environment is virtually possible to achieve for middle class children. Even if monolingualism was shown to promote acquisition, the validity and ethics of a recommendation to restrict language input must be seriously questioned if basic cultural literacy involves some degree of multilingualism. In the case of assessment, bilingualism must be factored into all decisions. The utility of informal

assessment for this purpose is evident. Yet the literature provides little guidance on how to account for the effects of multiple input languages with different levels of exposure when assessing an individual child.

In order to begin to develop information relevant to establishing normal development, one important source of information is to gather as much descriptive information about the language as possible. Such information will help to organise observation. In addition, understanding a language's basic typology may be useful. Typological features of a language may contribute to patterns of acquisition (Slobin, 1982) and hence assist in predicting what typical developmental patterns should be.

Kannada Grammar

Kannada is typologically classified as an agglutinative language. It has a rich morphological structure which is highly regular. Kannada uses extensive case-marking to indicate grammatical relations, including the accusative, nominative, genitive, dative, locative, source and vocative cases. In its agglutinating morphology, the nouns, verbs and morphological suffixes can be strung together resulting in a sentence that is expressed as a single, long word. For example, a sentence like 'It was made by him' can be expressed as */avanindhamadalpattidhu/*, where */avanu/* is a pronoun (him), *madu* is a verb (make) and */nindha/* and */pattidhu/* are morphological suffixes indicating case and voice (Steever, 1998).

Syntactic constructions in Kannada follow a basic subject-object-verb word order, which is relatively fixed, although there is some leeway for stylistic variations (especially in literature). The English sentence "Rama went to the forest" is expressed in Kannada as */rama kadige hodanu/*. This is glossed as */rama/* (proper noun), */kadige/* (forest-locative), */hodanu/* (go-past-3rd person- singular-masculine).

Clinical Assessment of Paediatric Language in India

The field of communication disorders started in 1965 in India, and has seen rapid growth over the past few decades. There are about ten institutions in India that offer degree programs in speech language pathology and audiology. The undergraduate program is for a duration of three years, and the masters program is for two years. The undergraduate programs are offered in both speech pathology and audiology. Specialization in speech pathology or audiology is offered in two institutions

only at the master's level. There are three universities offering doctoral programs in speech language pathology and audiology.

Clinical training is emphasised in both undergraduate and masters programs. Children with language disorders (typically those with significant developmental disabilities, such as autism and mental retardation) and adolescents with stuttering form the bulk of the typical caseload at most institutes of speech and hearing, followed by adults with voice disorders. Adults with aphasia and TBI form a smaller percentage of the caseload, except in a few institutions that are attached to hospitals. Another growing area of clinical practice is the assessment and treatment of language-based literacy problems.

Three decades ago, the assessment of speech and language disorders was conducted informally, owing to the limited supply of formal and standardised assessments. The last two decades have seen progress, with the development of instrumentation and other tools for the assessment and diagnosis of voice disorders and stuttering. Rama Mohan Babu, Rathna, and Betagiri (1972) authored the first phonological assessment in Kannada, which was subsequently translated into several other Indian languages. *The Linguistic Profile Test* (LPT; Karanth, 1986) was the first test in Kannada to be developed for the assessment of language disorders, a criterion-referenced test designed to profile language in adults with suspected language impairments. It has also been used to assess older children's language. The availability of these tests has facilitated identification of impairments in school age children, however to date no formal tests targeting preschool populations have been published. The lack of such instruments impedes the early identification of language impairments other than phonological, thereby restricting opportunities for early intervention.

In 1990, the regional rehabilitation training centre and Ali Yavar Jung National Institute for the Hearing Handicapped, Bombay, instituted a project entitled 'Development and Standardisation of Linguistic Profile Test and Articulation Tests in Seven Indian languages'. Thus the phonological tests (Raithna et al., 1974) and LPT (Karanth, 1986) became available in more Indian languages. The Boston Naming Test (Kaplan, Goodglass, and Weintraub, 1976) and the Western Aphasia Battery (Kertesz, 1982) are also available in a few Indian languages.

Research in Language Development and Disorders in India

Most research in South Indian languages has focused on literacy (Ramaa, Miles, and Lalithamma, 1993; Purushothama, 1990; Karanth, 2002)

and adults with aphasia (Karanth & Rangamani, 1988). There have been a few acquisition studies in Tamil (Vaidyanathan, 1987; Raghavendra and Leonard, 1988) and Telugu (Sailaja, 1990), two Dravidian languages spoken in south India.

Vaidyanathan (1987) studied the development of forms and functions of interrogatives in Tamil speaking children. Speech samples were audio recorded, and analysed for pattern of acquisition of interrogatives, revealing a developmental progression similar to English for these forms. Vaidyanathan (1991) investigated the acquisition of forms and functions of negation in Tamil speaking children, using the same procedure as his 1987 study, finding that the acquisition of negation followed a developmental pattern with three stages.

Raghavendra and Leonard (1988) investigated the acquisition of verb inflections in three, 2-year-old Tamil-speaking children. The investigators made an audio recording of a speech sample where the children were engaged in conversation about the here-and-now and also regarding what happened in their crèche (day-care). The children were also asked to describe a few pictures depicting actions to elicit utterances in the present, past, and future tenses. Findings of this study revealed a high percentage use of verb inflections indicating person, number, gender, tense, aspect, and modality, even as early as 2 years of age. Raghavendra and Leonard (1988) pointed out that early acquisition of verb inflections has been reported in other morphologically rich languages of agglutinative typology, such as Turkish. The authors suggested that the early acquisition of these verb inflections could be due to the inflectional properties shared by these languages. Similarly, a longitudinal study by Sailaja (1990) investigating the development of verb forms in three Telugu-speaking children revealed early development of past verb forms. Agglutinative languages have highly regular and salient morphology, and these properties may facilitate acquisition. Emergent views of acquisition suggest that highly regular and obligatorily marked forms should assist in development of grammatical understanding (see, e.g., Bates & Goodman, 1999, who discuss an emergent account of grammatical development based in lexical growth; Slobin, 1982; see also Aslin, Saffran, & Newport, 1999 for a discussion of statistical learning in children).

To the authors' knowledge, there have been no longitudinal or cross-sectional studies on language acquisition in Kannada. While some data exist on other Dravidian languages, few studies have investigated

acquisition in Kannada. The only paper we located dealing with language acquisition in Kannada was an experimental study of 3-year old children, investigating the causative construction in Kannada (Lidz, Gleitman, and Gleitman, 2003), with the results presented as evidence in favour of a nativist view of acquisition. The present work is a pilot study investigating the feasibility of language sample analysis for assessing speakers of Kannada. Data from normally developing children and adolescents with mental retardation were collected and compared. The aim was to develop appropriate data collection and analysis methods for working with data in the Kannada language context, with consideration given to the issues raised by bilingualism and bidialectalism that exist in this region.

Method

Participants

Both typically developing children and adolescents with mental retardation participated in the study. All participants were required to be native speakers of Kannada. The children with typical development had no history of developmental delay or speech and language problems. Children with mental retardation attended a special school, having been diagnosed with mental retardation based on IQ testing.

The children with typical development consisted of 4 boys and 1 girl, ranging in age from 2 to 6 years old. The typically developing children were recruited from the neighbourhood of the first author by contacting families with children speaking Kannada in the home as their first language. Background information was obtained by interviewing primary caregivers. In addition to age, caregivers were asked whether the children had any history of significant medical or developmental problems, or history of speech and language delay or intervention. None of the children were reported to have experienced any of these problems. One was not attending school, of the others, one (SK, a boy aged 5 years) attended an English medium playschool and the others attended Kannada medium schools. In all cases, Kannada was the language spoken at home, however, 4 of the parents also spoke a local language, Tulu, although none reported using this language in the home. The parents in 4 of the families were fluent in English, but denied use of this language in the home. The child who attended the English medium school had previously spent some years in the Middle East, and was more exposed to English while living there.

The children with mental retardation consisted of 2 boys and 2 girls, ranging in age from 13 to 17 years. All were students at a special school for

children with cognitive disabilities, and were selected after teacher referral based on their ability to converse at the sentence level. Table 1 illustrates the background information of the adolescents with mental retardation, obtained from agency records. The typically developing children were all speakers of the Havyak dialect of Kannada, which is spoken by a Brahmin subcaste in Karnataka. The children with mental retardation spoke a distinct but closely related dialect common in the Udupi district where many speakers of Havyak Kannada reside.

Table 1
Background information for Kannada-speaking
adolescents with mental retardation

<i>P</i>	<i>A</i>	<i>Gender</i>	<i>LSH</i>	<i>LI</i>	<i>MH</i>	<i>IQ</i>	<i>Diagnosis</i>
K	17	Female	Kannada	None	Cerebral Palsy	Not available	Moderate MR
S	13	Male	Kannada	Group therapy for 1 month	None	Not available	Moderate MR
B	13.5	Female	Kannada	None	Visual defects	48	Moderate MR
R	14	Male	Kannada	None	Epilepsy	Not available	Educable

[P = Participant; A = Age (years); LSH = Language spoken at home; LI = Language intervention; MH = Medical history]

Ethics clearance

Ethics clearance was obtained from the Human Subjects Review Board at Bowling Green State University.

Data collection

The language samples were collected in a naturalistic manner to elicit maximum competence from these children. The language samples of typically developing children were collected at their homes, during their interactions with parents, siblings and the first author, a native speaker of Kannada. The interactions mostly involved free play with toys, manipulation of the tape-recorder, and looking at picture books. Interactions with adolescents with mental retardation were conducted at their school, and mostly involved conversations related to their favourite sports and school activities.

Data transcription

The recorded language sample was first transcribed using Kannada orthography, and then transliterated into English orthography. A morpheme-by-morpheme gloss and a colloquial translation of the speech samples were both included in the transcription. A final line reporting any errors (pragmatic, lexical, or syntactic) was also incorporated (marked ERR in example 1):

Example 1:

C: *id akke plag ha:kbe:ka?*
 this for (dative suffix) plug put should?
 Should you put a plug for this?

ERR: Child does not wait for a response and shifts the topic.

Data analysis

The data was analyzed in order to compute MLU-m and also to identify errors in morphosyntax, semantics and pragmatics. All the data were analyzed by the first author who is a native speaker of the Havyak dialect of Kannada (also sometimes referred to as the Barkur dialect; Acharaya, 1971). This dialect and the closely related Udupi region dialect are somewhat different from standard Kannada in terms of morphology, phonology and semantics. Morphological differences frequently involve the Barkur dialect being more condensed than the standard. For example, *hogakke* (to go) in standard dialect would be condensed to *hopke*, *barbeku* (should come) becomes *barku*, and *hogtane* (he will go) becomes *hotha*. There are also regular phonological differences, for example /e/ in standard Kannada is realized as /i/, and /u/ as /a/, in word final position. In addition, there are several lexical differences.

Results

Mean Length of Utterance

The mean length of utterance in morphemes (MLU-m) of the typically developing children ranged from 2 to 5.6, and the MLU-m of children with mental retardation ranged from 3.52 to 4.68. Table 2 illustrates the MLU-m of typically developing children. In our samples, the MLU-m of the adolescents with mental retardation was similar to that of

the typical 4- and 5-year-old children. Table 3 illustrates the MLU-m of children with mental retardation.

Table 2
MLU-m of Kannada-speaking typically developing children

<i>Subject</i>	<i>Age</i> <i>(years.months)</i>	<i>Number of</i> <i>morphemes</i>	<i>Number of</i> <i>utterances</i>	<i>MLU-morphemes</i>
RV	2.6	24	12	2
VN	4	59	19	3.1
VK	4	117	36	3.25
SK	5	113	26	4.34
RJ	6.5	196	35	5.6

Table 3
MLU-m of Kannada-speaking children with mental retardation

<i>Subject</i>	<i>Age</i> <i>(years.months)</i>	<i>Number of</i> <i>morphemes</i>	<i>Number of</i> <i>utterances</i>	<i>MLU-morphemes</i>
S	13	60	17	3.52
B	13.5	112	28	4
R	14	90	24	3.75
K	17	89	19	4.68

Error analysis

Error analysis for the five typically developing children showed very few errors. There were 2 morphological errors and 1 syntactic error observed. The morphological errors were comprised of omission of a dative suffix by a 2.5-year-old child, and omission of a locative case marker by a 4-year-old. The word order error was use of subject + verb + interrogative pronoun instead of subject + interrogative pronoun + verb by the same 4-year-old child who showed omission of locative case marker. The other three children made no syntactic errors. There were only 2 semantic errors, both made by a 6.5-year-old child. These 2 semantic errors included the use of the word *na:vu* (we) instead of *namma* (our) and use of the word *banuvarege* (until it comes) instead of *hoguvarage* (until it goes). (Note that the substitution of a personal for a possessive pronoun might also be classified as syntactic.) The majority of the errors observed were pragmatic. Pragmatic errors occurred for all 5 children. These included unmarked

topic shifts, failure to wait for a response to questions they asked prior to shifting topic, provision of manifestly false information, and inappropriate responses to questions.

The errors of adolescents with mental retardation were pragmatic and morphological. No semantic errors were observed. The pragmatic errors were similar to those of the typically developing children, and consisted of sudden topic shifts and inappropriate responses to questions. One of the children also showed perseveration on a topic. While the two morphological errors observed in the samples from the typically developing children involved omission of morphological markers, the two morphological errors of the children with mental retardation consisted of use of incorrect morphological suffixes. The morphological errors observed were: a number agreement error, using *ma:didra* (do + plural suffix) instead of using *ma:dide* (do + singular suffix) by a 13-year-old child; and a tense error, the use of *ma:dide* (do + present perfect) instead of *ma:didu* (do + past) by a 14-year-old child.

Discussion

The primary aim of this study was to establish the feasibility of language sample analysis as a culturally appropriate clinical technique for Kannada speakers in India. The first author experienced little difficulty in using an audio tape recorder to collect spoken language samples from young typically developing children. Conversational discourse was elicited from the adolescents with mental retardation. Use of the tape recorder was not problematic, as it was a relatively familiar item to all participants. There was one child perhaps less familiar with the tape recorder, as evidenced by him asking numerous questions about it. Even though this child may have found the tape recorder to be a novelty, his very lack of familiarity worked in favour of increasing his willingness to talk. Parents were comfortable with the language sampling in the home context. While children participated willingly, productivity was not as high as needed for the most representative sample. Further exploration of techniques to increase number of utterances is warranted.

These preliminary results are consonant with the findings by Raghavendra and Leonard (1998) on the acquisition of Tamil and Turkish acquisition literature by Aksu-Koc and Slobin (1985). Reports on these typologically similar languages indicate early acquisition of inflectional morphology. Kannada-speaking typically developing children even as young as two and half years (the youngest participant of this study) had acquired morphologically correct forms indicating person, number, gender and

tense. Learning a morphologically rich language such as Kannada may result in differences from the pattern of development seen in more isolating languages such as English. English-speaking children in the earliest stages of acquisition frequently use content words bare of morphological markers (Bates and Marchman, 1988). It has been speculated that children learning more morphologically rich languages may use more morphemes in their earliest utterances (Raghavendra & Leonard, 1988). In the limited data presented here, we saw no examples of bare stems: even in the rare instances where one obligatory morpheme was omitted, at least one other was present. Kannada-speaking children may not go through a 'telegraphic' stage, because their input language is rich in morphology, and they rarely hear bare root words. Morphemes are the salient feature of all agglutinative languages, including Kannada. Since morphological aspects are important, it can be predicted that morphological markers will be early acquired and less likely to be omitted, both among young language learners as well as the language disordered population. Such a prediction accords with the 'morphological richness' account (Dromi, Leonard, and Shteyman, 1993), which suggests that children can more easily acquire morphology in languages where morphology is highly salient, frequent, and regular. Such a functionalist perspective has been critiqued, however. Batman-Ratyosyan and Stromswold (2001) report the production of bare stems by 2-year-old Turkish-speaking children, despite the rarity of bare stems in the input. Lidz et al. (2003) found that input frequency of the causative morpheme in Kannada did not accord with child behaviour in an experimental context (Lidz et al., 2003). Lidz et al.'s interpretation of their data has in turn been criticized, as taking an overly narrow view of the types of information present in the input (Goldberg, in press).

Despite the controversial status of input-based theories of early morphological development, languages do differ in amount of obligatory morphology. English morphology, specifically tense-marking, has been found to be an important difference between children with and without SLI (Rice, Wexler, & Hershberger, 1998; Rice & Wexler, 2001). If morphology is a significant marker for language disorder in a relatively isolating language such as English, it may be logical to expect morphology to be at least as important in agglutinating and polysynthetic languages with many more obligatory morphemes.

Our preliminary exploration of language sampling in Kannada indicates that language typology may offer a means to use sampling to assess (or at least screen for) language competence, even in the absence of normative information. The lack of literature on normal language

acquisition in Kannada, coupled with the lack of formal tests, hampers clinicians' ability to investigate language competence. Most language assessment is carried out by translating English assessment tools into Kannada, which seriously compromises the validity and reliability of these assessments. India is not alone among former British colonies in the use of English in clinical contexts (Jordaan & Yelland, 2003). Language sample analysis has been a useful tool for identification of, planning intervention for, and documenting progress of children with language disorders (Leadholm & Miller, 1994; Lund & Duchan, 1993; Owens, 2004; Paul, 2001). The data presented here represent a preliminary attempt to determine the feasibility of using language sample analysis to identify children with language disorders in Kannada-speaking populations. Our samples suggested that errors in morphological form might be a possible difference between typical and impaired populations, although with the limited data such a speculation is quite preliminary. In addition, the relatively short MLU-m of the children with mental retardation supports further exploration of MLU-m as a clinical tool for assessing Kannada speakers. In the absence of any data on typically developing adolescents, these data are difficult to interpret. These speculations need further support from longitudinal and cross-sectional studies of child language acquisition in Kannada speakers, and also speakers of other morphologically rich languages.

The lack of normative information is not the only challenge faced in attempting to use language sampling in India. Multilingualism and multidialectalism pose significant problems in the assessment and intervention for language disorders in Kannada-speaking children. In addition to normative studies, future work in Kannada must also focus on finding methods of data collection and language sample analysis that are sensitive to the issues of multilingualism and multidialectalism. In working with the samples in the present data, the first author noted several examples of acceptable forms in Havyak Kannada that would be unacceptable in standard Kannada. While this posed no problem for him as a speaker of this dialect, majority dialect speakers might code these morphological and lexical differences as errors. As in other multilingual cultural situations, there is a need for heightened awareness of the range of forms that exist in the language being assessed. Clinical training in India faces the special challenge posed by the wide range of dialects, many of them little-known. We are intrigued by the possibility that presence of multiple morphological errors is so rare as potentially to be developed as a screening tool for developmental language disorder. Yet relying on this approach still requires familiarity with the morpho-syntax of the child's dialect. If morphological

analysis evolves to be a useful clinical tool, verification of samples with persons familiar with a child's home dialect will be needed. As Indian clinical training evolves to increase emphasis on developmental language disorders, the importance of specific training in linguistics and dialectology will increase.

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MODULARITY AND FUNCTIONAL CONNECTIVITY IN THE BRAIN: PROPOSALS FOR LANGUAGE DISORDERS

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Abstract

This paper examines some of the recent advances in tracing functional connectivity of language systems in the human brain. The earlier models of modular approaches are contrasted with the new approaches to understand different developmental and acquired disorders of language processing in terms of local and distant connectivity. An attempt has been made to propose schematic representations where the modular views and the functional connective models can be incorporated together to account for the different deficits that one observes in patients with language disorders. It is suggested that the current functional approaches that demonstrate anatomical-functional dependencies among different brain areas will vastly modify our current notions of language representation in the brain and our thinking on the genesis of language disorders.

On the Organicity of language

Any discussion regarding the biological basis of language, presupposes the organicity of language. Organicity refers to the idea that human language has physical properties that could be understood through systematic exploration of the brain. We get the reference about the organicity of language and how language is possibly generated from a core organic matter (in modern terms considering the UG as a biological organ, and the possible languages it can generate adhering to the principles and parameters, i.e. Chomsky 2005; Anderson & Lightfoot, 2006) from the works of the great German naturalist and linguist Wilhelm Von Humboldt (Humboldt, 1836). For Humboldt, language was essentially *Wiedererzeugung* (Ott, 2005). For Goethe it was his *Urform*, a body of fixed principles that determines a class of possible organisms (Wahl, 2005). Hence, the idea that

there exists a priori biological base, from where the great diversity of human languages evolve, has charmed linguists since long. And this idea as well has a central role in our thinking about the arrangement and representation of language and its various levels in the brain. Eric H. Lenneberg proposed that, the study of language must proceed as an integral part of the organic whole (Lenneberg 1967: 3). Over the last decades, Chomsky has considered this organicity and has often covertly argued for an empirical examination of language in humans, which will be in the domain of biology. Even, he has made it explicit, suggesting that such a study of "mental" phenomena should be at par with other natural phenomena like having "chemical", "optical" or "electrical" properties (Chomsky 1995 a). But however metaphorical these comparisons of language with other physical categories may appear at first, they are eventually being realized now.

But why spend time pondering on "Organicity" of language? Because this concept has such a pervasive influence on our current notions of biological basis of language representation that demands clarification. The organicity as a concept seems very vital for the study of human languages. When one explores the possible organic base of language in the brain, the apparent consideration of the laws of the physical world appears to govern its movement and expression. This is purely the case with modern brain imaging studies, where one knows the time course of activations for different linguistic levels in the brain, where the biochemical signals that are measured in the domain of time and space, are taken to be the actual organic ingredients of what we call language at a surface level (see Lieberman 2006 for a detailed discussion). So, when language is proposed as a definite biological organ, with its own unique evolutionary path, one must explore the physical forces that shape and control this path. Van Essen (1997) remarks that it is genetics and physics that govern evolutionary forces that shape the human brain, where language grows. But this proposition seems suitable for the brain as far as it is a tangible physical organ in time and space but what of language? It is an invisible abstract symbolic system that seems to dynamically circulate in the brain's neural system. It is of particular interest to explain the physical principles that determine the shape, i.e. the surface realizations like word order, phonological systems, word meanings etc of a particular language and what is the mechanism involved. These physical forces must also play a crucial role in the acquisition of languages, their various disorders and disorganization when there is an insult to the brain.

Here the notion of "genes" become very handy so far as our quest is to uncover the physical forces that govern language and look after its

maturation in humans. As the genetic programme unfolds, structures are built which in turn obey physical laws. There is interweaving of genetics with an epigenetic system (Jenkins 2000). This genetic programme that is responsible for the growth of language as any other organ then must be the real physical blueprint. Chomsky's now classic dichotomy of "performance" vs. "competence" could be the outcomes of these genetic processes in humans. This blueprint then could give rise to the physical systems of modular architecture that is so vital for understanding language processes. For example, the genetic programme of a particular individual, who has internalised a particular language, has a competence, i.e. everything linguistic this programme can produce under optimal conditions and whose actual performance is limited to several parameters. And logically comes to possess a modular brain structure for optimal language capabilities. This modular structure then empowers him to transform his linguistic competence into performance, which is directly controlled at the level of interplay of genes and appears restricted or pre-designed. Hence the examination of human language, as a truly biological product of human evolution, must proceed first from the identification of those physical forces that control it. It is these forces of nature that construct and shape the patterns of human language, which we will consider in physiological and neurological terms, calling them modules.

Modularity of Brain: Physiology, Structures and Language

It is important to first look at the physiology of the human brain, as it is the physical structure where language resides or grows. The division of the brain into different cognitive modules, and several processing zones in both the hemispheres make matter complex. As this presupposes that language must be then divided and allotted to these several zones for optimal processing. The modularity thesis (Fodor, 1983) claims that there are brain structures, modularly arranged and that produce highly abstract cognitive and linguistic structures. Modularity of mind has enjoyed tremendous success so far as a guiding principle to understand how the brain creates the mind. But Fodor has later modified and criticized the interpretations of modularity (Fodor 1987:27 and 2000). Explanations in this framework become complex when we turn from the "soft" or "abstract" conceptualisation of modules to their physical representation in the human brain. In this respect the recent arguments of Sperber (2002) appear helpful in our discussion of language as a modular process in humans. Sperber proposes a thesis called "massive modularity" which divides modularity into many levels, thus making comparisons simpler. Modularity of the mind at the following levels offers unique windows to view language functions, from each such level.

1. At the morphological level, modules are considered as structures and functions, the extent to which, and the manner in which the organism and its sub-parts, in particular the mind/brain, are an articulation of autonomous mechanisms.
2. At the developmental level, modules are approached as phenotypic expressions of genes in an environment. Cognitive modules in particular are hypothesized to explain why and how children develop competencies in specific domains in ways that could not be predicted on the basis of environmental inputs and general learning mechanisms alone.
3. At the neurological level, modules are typically seen as dedicated brain devices that subserve domain-specific cognitive functions and that can be selectively activated, or impaired.
4. At the genetic level, what is at stake are the pleiotropic effects among genes such that relatively autonomous "gene nets" get expressed as distinct phenotypic modules. Genetic modularity is more and more seen as crucial to explaining on the one hand phenotypic modularity and on the other the evolution of specific modules.
5. At the evolutionary level, hypotheses are being developed about the causes of the evolution of specific modules, and of genetic modularity in general. Understanding the causes of the evolution of modules helps explain the known features of known modules and also search for yet to be discovered features and modules.

(From Sperber 2002)

So, does it mean to say that "language" evolves with the collaboration of all these modules or only a few? On the other hand, one can ask, which level of modularity best explains the representation of language in humans? It possibly depends upon that aspect of language which is our focus of observation. If we are trying to explain the acquisition of language in children, then modularity at the "developmental" level may be useful but in the case of aphasic language disturbances, the neurological level of modularity may be more suitable. Hence modularity thought at different levels only becomes a platform for discussion, where the issue at hand can be explained more accurately. For our purpose, we will consider the Neurological Modules as it is at this level that most of the adult aphasic data is concerned and later discussion on functional connectivity issues will be adequately matched.

From Modularity to Functional Connectivity

The neurological level of modularity can be well explained with our already existing knowledge of language representation in the brain in terms of its physiology. The lateralization of language, the localization of speech in the Broca's area, the understanding of speech in the Wernicke's area and the presence of homunculi (Loritz 1999) in primary sensory and motor cortex indicate that there are indeed specific places in the cortex where different linguistic process originate, just as there are places or modules in a computer for different sub-programmes. These modules then can be analyzed at the architectural or the neurological level. The most convincing evidences of such modular arrangement of brain functions come from the works of Sperry (1964, 1970). It is assumed that such modules that process specific linguistic information often are located in specific brain areas. Though recent observations have indicated that these modules are very interactive in nature and the anatomical areas that seem to contain these modules are highly connected. This is known as the anatomico-functional connectivity (Zemanova, Zhou & Kurths 2006). Anatomical distances of different cortical regions often appear to diminish when they functionally collaborate with each other to produce particular linguistic functions. Functional connectivity obviously refers to the way distantly located brain areas synchronously become activated for the processing of very specific linguistic -cognitive phenomena under observation. Clusters of neurons representing these specific cortical or sub-cortical areas are phase locked when functional connectivity is established among them (Nagashino et al 2002). There is often parallel activation and deactivation noted in these types of language specific neuronal connectivity (Meister et al 2006). Traditionally many important cortical zones that are located at the converging points of different brain lobes have been considered as areas that control these functional connectivity or at least work as central nodes. For example the angular gyrus, which lies at the intersections of parietal, temporal and occipital lobes has been known as such a zone where functional connectivity is realized or controlled (Horwitz et al 1998). First explored by Dejerine (1982) and later proposed strongly by Geschwind (Damasio & Geschwind 1884), the angular gyrus is thought to produce pure forms of alexia. It has been shown that the independent modules for hearing, language and vision send their outputs to the angular gyrus for processing during the execution of cognitive acts like "reading". These conclusions might seem obvious because the angular gyrus lies on a diffused intermodular pathway connecting all these different functional modules. Similarly the superior temporal gyrus (STG) has been reported to coordinate speech production and speech perception, making it another

important anatomical zone where modules belonging to different levels interact (Buchsbaum, Hickok & Humphries 2001). But how modularity and functional connectivity fit into this static view of cortical functions? How far this notion of a central "controlling" area in brain-language functions is justified or even reasonable?

Modularity of mental/cognitive structures and the connections among them is the central theme in current neuroscience of language. And we can tentatively answer the questions raised above if we consider modularity as well as functional connectivity together while explaining brain-language functions. In the history of neurolinguistics, it was Carl Wernicke who first sketched the interactive model of brain functions and the coordination of different "centres" (Wernicke 1874). Later this early conceptualisation of interactive brain physiological structures and emerging linguistic phenomena were given a concrete shape by Lichtheim in 1885. This "Wernicke-Lichtheim model" has remained the standard neuropsychological theory and the first most important precursor to connectionism (Cage and Hickok 2001) and also to the now popular Hebbian (Hebb) model of cell assembly (Cage & Hickok 2005) as well as to the models of Parallel Distribution Processing (PDP: Rumelhart & McClelland 1986). In this model, each normal higher function is explained in terms of an underlying neural pathway that includes the input/output systems; related functions employ portions of the pathways used for other functions. The actual physiological pathways of connections were demonstrated by Geschwind through his famous disconnection syndromes (Geschwind 1965). It has been shown that fibre pathways of connections exist between Broca's and Wernicke's area through the arcuate fasciculus and also through the Angular Gyrus. Figure 1 shows these classical centres of language processing in the brain and their possible interconnections. Here it is important to stress that modularity as practiced now, in its various forms, cannot be straight away brought to this level of simple and gross neurological connectionism. However recent studies involving functional MRI and Diffusion Tensor Imaging have been able to demonstrate that indeed such pathways whose functions exist may be considered as modular.

However strict localization of language with the help of a modular and connectionist framework has been critiqued. Loritz (1999) observes that if there is a 'module' for language, then the evidence we have seen would suggest that the module is neither Broca's area nor Wernicke's area, or the Angular Gyrus. They are also not specific to the left hemisphere. If there were a "module" for language, it would seem that the best physiological candidate is the arcuate fasciculus. But it is neither language

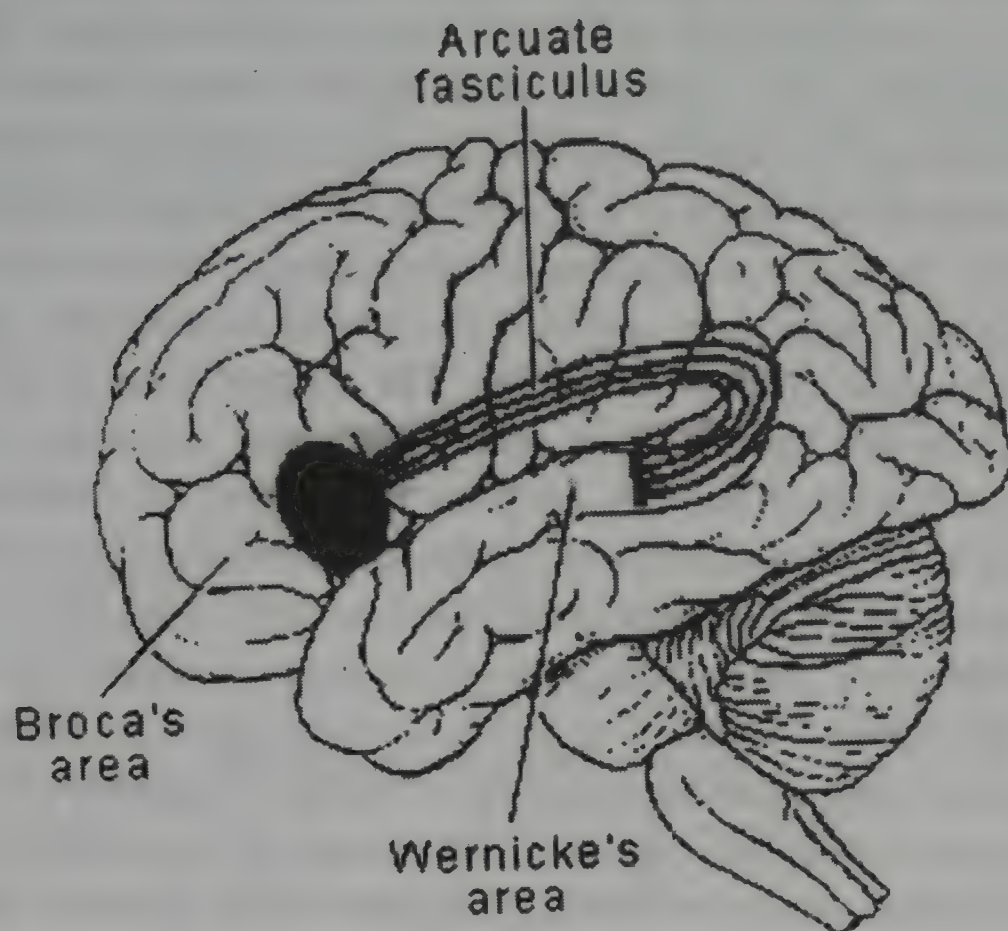


Figure 1

Left hemisphere showing Broca's area, Wernicke's area and Arcuate Fasciculus. Classical areas of language processing in the brain showing connections. This is the classical connectionist network that became dominant till recently and popularised by Geschwind.

specific nor really a "place" in the brain" (p. 68). The notion of shifting modularity all across the two hemispheres and composing the many areas devoted to language processes have been also linked to the enormous plasticity seen in the human brain (Changeux 1985). It appears that strict localization of any language function cannot be a candidate for fruitful examination of brain-language relationships. The only way through which we can achieve any reasonable explanation of cortical dynamics of language representation seems to be on the basis of cortico-cortical and cortico-sub-cortical connectivity.

Functional connectivity and modularity: Where is language?

Modularity of the mind or the physical division of the brain into different self-encapsulated functionally autonomous systems has remained the dominant theme in cognitive science. And this had affected the views of language representation in the brain. It would be reasonable to have an understanding of emerging issues in the discussion of functional connectivity of the brain as suggested by several neuroimaging experiments

and then re-examine the concept of modularity in reference to such work. Functional connectivity of the brain means simultaneous activations of different cortical areas, located in different cortical zones. Cortical or sub-cortical areas are said to be functionally connected to each other and become active when there is a requirement for a specific function. Many studies exist that have demonstrated white matter connectivity in animals such as cortico-cortical or cortico-sub-cortical connectivity using various tracer techniques (Mesulam 1988). The demonstration of anatomical connectivity in the human brain among different language areas has not been achieved so far. Although, Meynert in 1870 was the first to suggest that there exists a white matter fibre, i.e. the arcuate fasciculus which connects Broca's area and Wernicke's area (Bastian 1897) and later Geschwind's proposal that pure conduction aphasia happens if there is an insult to this pathway (Geschwind 1970). But so far there has been no report where the exact terminal ends of arcuate fasciculus has been mapped and shown to be precisely connecting the two important language areas (Dejerine, 1892). However current studies of functional connectivity does not depend much on tracing the actual anatomical connectivity among different brain regions but the spatial or temporal activities recorded in these regions through fMRI or MEG. Here the anatomical location of the regions, the actual distance between them or if at all any fibre that connects them, becomes irrelevant. Invasive techniques such as the cortico-cortical evoked potential during the surgery of patients with epilepsy have offered clues to different functionally connected brain areas in widely varying cortical locations (Matsumoto et al 2004). For example, the connections between SMG (Supramarginal Gyrus BA40), STG (Superior Temporal Gyrus: BA 41 and 42) and Broca's area (BA 44 and 45) have been conformed by cortico-cortical evoked potential studies (Matsumoto et al 2004). These functional connections between these anterior and posterior areas of the perisylvian language areas have been found to be bi-directional. This means information flows in both the direction. There is as well a connection between the anterior language area in the IFG (Inferior Frontal Gyrus BA 44 and 45) and the sub-cortical anterior insula. This connection between Broca's area and anterior insula has also been related to speech planning and speech production (Wise et al 1999). Another region in the left pre-central gyrus of the insula also has been reported to be involved in speech planning and articulation (Dronkers 1999). So it appears that for speech production, there exists functional connectivity among different anterior and posterior areas for specialized functions like planning of articulation and executing language production. Clinical studies on patients with speech motor disturbances have confirmed this hypothesis (Dronkers 1999). Figure 2 shows the schematic representations of functional

connectivity among these different anterior and posterior language areas on Broadmann's map of the cerebral cortex. There also exist connections between the extra perisylvian languages areas like the basal temporal areas on the fusiform gyrus, which seem to be functionally connected to the posterior temporal areas like the superior temporal gyrus.

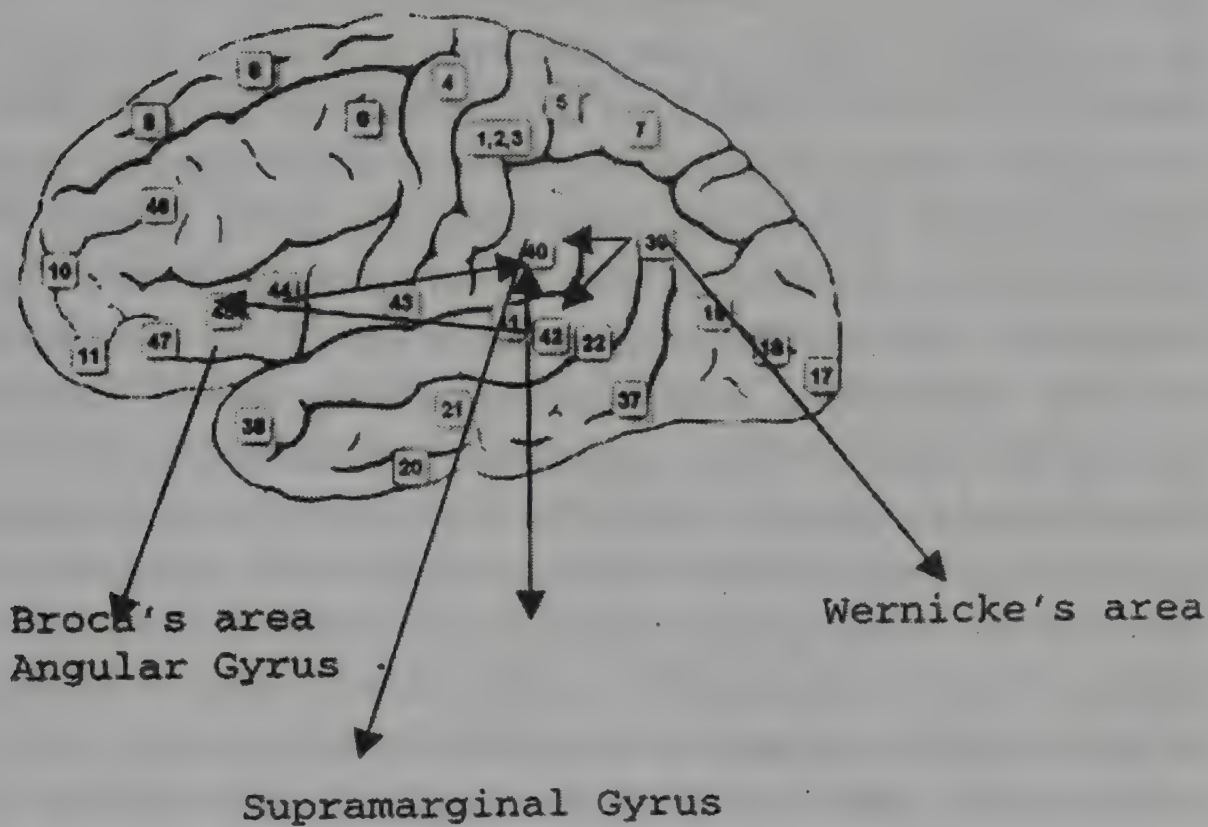


Figure 2

Invasive procedures like the cortico-cortical evoked potentials recorded via electrodes planted during epileptic surgical procedures have identified several anterior-posterior language areas to be functionally connected. The connections between Broca's area, Superior Temporal Gyrus and Supramarginal Gyrus have been shown. Arrows indicate established functional connectivity among regions. Sub-cortical areas like Insula have not been shown.

Functional Connectivity and Different Linguistic levels

Functional connectivity that exists in the brain during any cognitive operation may appear too complex to account when language in its entirety is concerned. It is easier to figure out the functional connectivity between different areas when one particular linguistic level such as the semantic or the phonological system is closely studied in normal humans or in patients under surgical procedures. It has been observed that the semantic system in

patients with gliomas located in different lobes have different distributed connections for semantic processing (Duffau et al 2005). The knowledge of a functionally connected anatomical network existing for serving the semantic system in these patients come from the fact that when stimulated by electrodes at specific positions different types of semantic paraphasias are elicited. A main ventral sub-cortical pathway underlying the semantic system, within the dominant hemisphere, joining the two essential cortical epicentres of this network: the posterior and superior temporal areas, and the orbito-frontal and dorsolateral prefrontal regions have been identified as an important network that subserves semantic processing in the brain (Daffu et al 2005). Apart from these studies on patients there have been reports on normal subjects, where the role of IFG (specific areas within the inferior frontal gyrus) has been reported to be crucial for semantic processing (See Bookheimer 2002 for an excellent review on the functional connectivity of semantic system in the brain). There have been arguments about the networks for phonological processing, may be because of the fact that the IFG (inferior frontal gyrus) has been the site for both semantic and phonological processing (Davis et al 2006). However in accordance with the hypothesis, strong functional connectivity between activity in ventral LIFG (left inferior frontal gyrus) and activity in occipital and temporal cortex is observed only for words, and strong functional connectivity between activity in dorsal LIFG and activity in occipital and temporal cortex for words, pseudo words, and letter strings, but not for false font strings. These results demonstrate a task-dependent functional fractionation of the LIFG in terms of its functional links with posterior brain areas (Bokde et al 2001). Functional connectivity for a possible phonological network has been revealed for subjects with dyslexia. As in dyslexia, the most important impairment is in the domain of a generalized phonological processing. It has been observed that, for dyslexic readers the connectivity between the angular gyrus and different areas of the occipital and temporal lobes are weak for phonological processing. For normal readers these connections have been shown to be normal (Pugh et al 2000). Using positron emission tomography, it has been demonstrated that in normal subject's regional cerebral blood flow in the left angular gyrus shows strong within-task, across-subjects correlations (i.e. functional connectivity) with regional cerebral blood flow in extrastriate occipital and temporal lobe regions during single word reading. In contrast, the left angular gyrus is functionally disconnected from these regions in subjects with developmental dyslexia, suggesting that the anatomical disconnection of the left angular gyrus from other brain regions that are part of the "normal" brain reading network in reading disorders (Horwitz et al 1998). Connectivity research has also focused on the processing of regular and irregularly inflected word forms. It

has been found that a fronto-temporal network, including the anterior cingulate cortex (ACC), left inferior frontal gyrus (LIFG), bilateral superior temporal gyrus (STG) and middle temporal gyrus (MTG), is preferentially activated for regularly inflected words than irregularly inflected ones (Stamatakis et al 2005). Functional connectivity among different brain regions have been reported for syntax processing, such as the connections between the left IFG (Inferior Frontal Gyrus: Broca's area) and locations in Superior Temporal Gyrus and Insula (Dodel, S. 2005).

What does Functional connectivity mean for Linguistic processing?

The human brain is an amazing model that displays constant segregation and integration in real time to activate diverse range of cognitive-linguistic functions. The integration within and between functionally specialized areas is mediated by functional or effective connectivity. The characterization of this sort of connectivity is an important theme in many areas of neuroscience such as explaining the representation of different linguistic functions in the brain networks and what happens to these networks in the case of any developmental or acquired impairment, i.e. developmental dyslexia vs. aphasia. Functional and effective connectivity actually mean the topography of distributed neural systems, integration between cortical areas, time-dependent changes in connectivity and non-linear interactions (Friston, 1994). Since linguistic events differ widely in their locales of activity and are not generally located at any particular area of the brain, functional connectivity approaches seem very fruitful in understanding the actual biological strata of language representation in human brain. More so, functional connectivity approaches are able to throw accurate insight on the genesis of different developmental and acquired disorders of language. Wherein such cases altered connectivity or connections that are weak compared to normal systems have been observed. Linguistic impairments have always been located to different large cortical sites like the Broca's or the Wernicke's area. But the connectivity research has thrown light on the crucial importance of different sub-cortical areas that lie deep under the cortex such as the insula and that have functional connections with cortical areas. This is a fascinating insight that will eventually make clear the processing divisions that occur between different cortical and sub-cortical brain areas. Figure 3 presents a schematic representation of cortical vs. sub-cortical connectivity in language functions. Our current knowledge of the contribution of the sub-cortical areas in language processing and disorders is not sufficient compared to cortical areas.

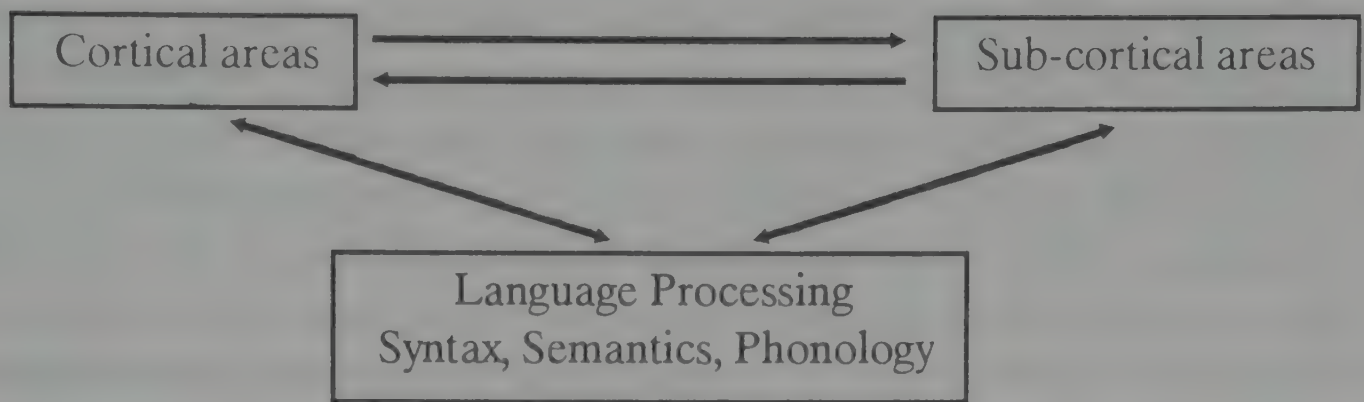


Figure 3

Shows schematically the functionally connected interactions between the cortical and sub-cortical areas of the human brain in language processing. Different levels of language such as Phonology, Syntax or Semantics will utilize different functional distributions in a specific manner available in these areas.

The Link between Modularity and Functional Connectivity

Modularity of mental structures presupposes that they are domain-specific and informationally encapsulated (Fodor 1983 and Coltheart 1999). If one defines human language as a collection of modules in the cognitive architecture of brain, then one is going to believe that syntax, phonology and semantics are all different modules and are not interactive. However this view of language representation has undergone changes and we now know that these linguistic levels don't emerge in children in independent temporal succession and neither break down in aphasia individually. Hence during the developmental years, when the linguistic representation in the brain is maturing, there has to be interaction among these various modules and later when the linguistic competence is fully achieved, these modules may have separate representational pathways in the brain. However this view also suffers from that fact that there are no pathways in the human brain that uniquely serve a single linguistic event but rather collaboratively support many associated functions. For example if we consider speech production as a separate module then it not only is controlled primarily by the areas of the left IFG (Inferior Frontal Gyrus) and by the Insula and also with feed back from posterior temporal areas. The same mechanism is engaged for syntax and phonological processing. This brings the idea of modularity into a rigorous test of its actual physiological base. Functional connectivity is a purely physiological phenomenon that is currently confirmed by the fact that different cortical areas are synchronously activated when the brain is processing language. So

even if we take for granted that there are modules in the brain that specialize in selective linguistic functions, and then we have to account how these selective functions are achieved by the processors that are located in different brain areas. Hence linguistic modularity could be reconsidered on the basis of functional connectivity research. Functional connectivity shows that pathways for linguistic processing are established and then they are inhibited as soon as the task is completed and then the same pathways establish completely different connections with other remote brain areas to achieve a completely different objective. For example, the connectivity that has been observed by anterior areas with more posterior or sub-cortical areas in the event of fluent speech production and reading. The importance of angular gyrus and insula for reading and speech production processes are new developments that suggest that the simple static anterior-posterior view of language connectionism is not valid and pathways are more dynamic and ever changing. But does it suggest that functional connectivity among brain areas do not behave as if they are in a modular arrangement? This is difficult to answer and depends what level of modularity (Sperber's division of modularity) one is considering. For example at the level of neurological modularity, functional connectivity among areas that are closely located (for example temporal speech processing areas on the superior temporal gyrus and the Wernicke's area) or the Broca's area and the areas of the motor cortex, may be broadly considered belonging to a particular module. Then this characterization will be too general and will not take into account the many small areas that are located within these areas that control different linguistic functions. The following schematic representation in figure 4 gives a tentative schematic representation of the interactive nature of modules on one hand and functional connectivity that is observed among brain areas based on the evidence discussed earlier in this paper.

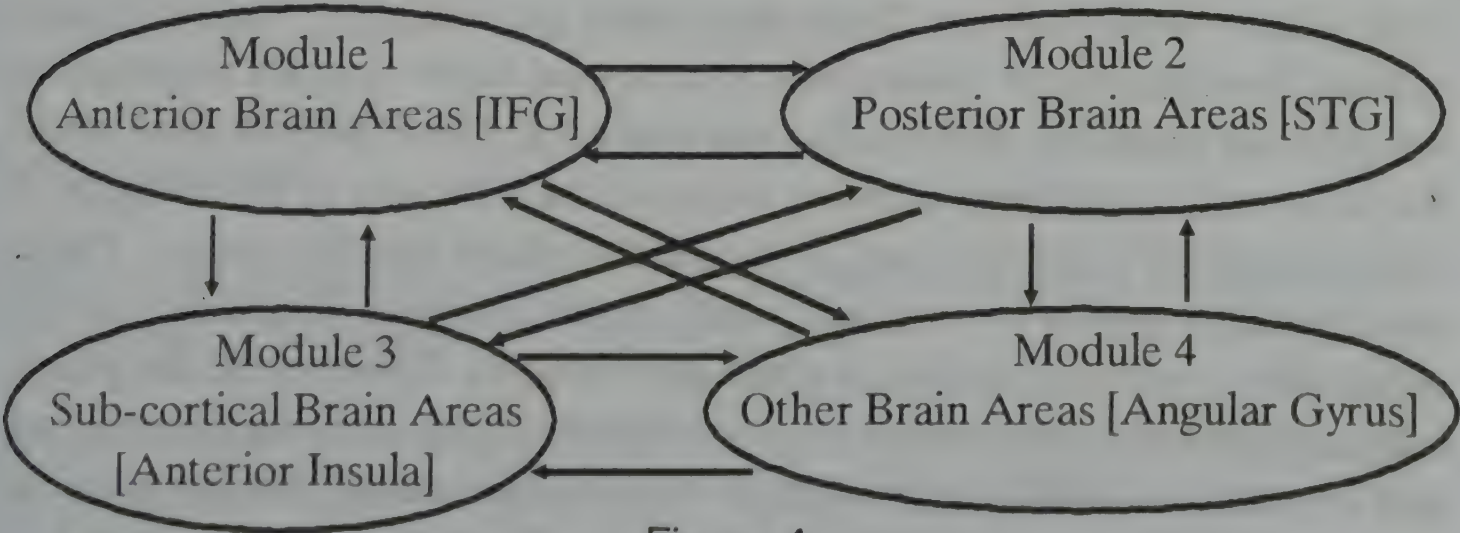


Figure 4

Showing different encapsulated modules that may exist in the brain and specific cortical and sub-cortical areas that represent them broadly. Arrows indicate direction of functional connectivity among these areas.

In the above schematic representation, modules have been represented by different cortical and sub-cortical areas that are known to be crucial for different levels of language processing. These modules are static as they represent physiological areas which have permanent sites and connections. But the connections between these areas are not static but dynamic and task dependent. Linguistic processing involves synchronous connections among these modules. The topographical distribution of these areas is quite wide ranging and begins with the most anterior language areas like the IFG (Inferior Frontal Area) that contains the Broca's area, then posterior temporal areas like the STG (Superior Temporal Areas), sub-cortical areas like the anterior insula and other important language processing areas like the Angular gyrus and the cerebellum. These modules that become functionally connected accomplish different linguistic processing. The modules proposed in Figure 4 can be considered to be the sites where following linguistic functions are located. However at this point the connections required to achieve these functions cannot be specified at a micro level except broadly.

- Module 1 Speech production/Semantic Analysis [Broca's Aphasia]
- Module 2 Speech perception [Deficits in Wernicke's aphasia]
- Module 3 Articulation Planning [Dysarthria]
- Module 4 Reading/Word Recognition [Developmental Dyslexia]

The above classification of modules is based on the findings of various brain imaging studies that have been reviewed in this paper and elsewhere (Mishra 2006). It now seems very likely that this schematic composition of various modules (there could be many other modules and many brain areas may lie there depending the linguistic task at hand) indeed show functional connectivity in neuronal terms and are responsible for different linguistic deficits that one observes. These deficits arise when the functional connectivity between the modules is broken or the strength of the connections is lost because of an insult to those specific tissues. These disorders also appear when there is shift in the temporal movements in the synchronous connectivity that is optimally required. However at this point, it appears that this can explain language disorders that are more prominent and common and which are known to happen because of damage to focal brain areas like Broca's or Wernicke's aphasia. However here it is crucial to understand the functional connectivity that exists between brain areas that are contained within the modules which is ultimately responsible for that impairment. This schematic representation also can possibly explain why we

observe different deficits in one particular impaired condition. For example motor articulation and semantic deficits as well as comprehension deficits observed in patients with Broca's aphasia. This also can explain the various language deficits that are associated with developmental dyslexia. That is probably, because functional connectivity could be parallel and changing. This means even though there is a focal insult to Broca's area, the connectivity of Broca's area with the Insula has been altered and hence the deficits in speech production. Similar arguments can be offered for many other disorders that involve more than one brain areas and where the functional connectivity between them is disturbed.

Summary

This paper consolidated the recent empirical findings in the area of functional connectivity of the brain and attempted to synthesize it with already known facts about different language disorders. The idea of functional connectivity among brain structures is a very powerful visualization in cognitive neuroscience currently and will greatly influence our thinking on the brain-language relationships and brain functions in different altered conditions like language disorders. As has been recently argued, this connectivity can be local or global. That means within local areas there may be different functional connectivity established whose outputs might then be connected with a remote area through long-range connections. These issues are getting more and more empirical attention now. However this approach seems important for revision of facts and theories of language disorders in particular. Functional connectivity studies will surely redefine the neural course of language dysfunctions in the brain and many new and little known cortical areas will be shown to be relevant for language processes. The current shift of neurolinguistic attention from cortical to sub-cortical sites is a great advantage in this direction.

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THE EARLIEST HERO STONES OF INDIA

K. RAJAN*, V.P. YATHEESKUMAR & S. SELVAKUMAR

Three remarkable hero stones going back to more than two thousand three hundred years inscribed with Tamil-Brahmi script have been discovered for the first time in the history of India recently at Pulimāṅkōmbai in Āṇḍipatti taluk of Tēni district, Tamil Nadu^{1*}. These hero stones were found on the southern bank of river Vaigai about 19 km. south of Vattalakundu, a major town and a taluk head quarter (Figs. 1-2). This is the first time in the history of India that such early hero stones are discovered with Brahmi script. This discovery throws new challenges to the archaeologists of India. These stones are about three feet in height and one to one and a half feet in breadth. The scripts were engraved on an undressed surface. They seem to have been buried into the ground to a height of one foot leaving two feet above the ground. These three hero stones seem to have been installed as a part of the urn burials found in large numbers at this site. In recent years they have been removed from their original position while leveling the ground for plantain and rice cultivation. Presently, the area is known as *vēppamarratu kāḍu*.

The first hero stone has three lines, reading *kal pēḍu tīyan antavan kūḍal ūr ākōl* (Figs. 3-5). It means "this hero stone is raised to a man called *tīyan antavan* of *pēḍu* village died in the cattle raid that happened at *kūḍal ūr*". The name *tīyan antavan* has two components namely *tīyan* and *antavan*. *Antavan* is probably the hero and *tīyan* may be of his father. First time, the term *ākōl* is occurred in the inscription. The term *ākōl* stands for cattle raid (*ā* means cattle and *kōl* means raid). The earliest Tamil grammar *Tolkāppiyam* speaks on the cattle raid as *ūr kolai ākōl pūcan mārre* (*Tolkāppiyam* 20:3). The village *kūḍal ūr* mentioned in the inscription may be identified with the Gūḍalūr near Kambam in Teni district.

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Of the three hero stones, the first is discovered on 23.3.2006, the second and third are discovered respectively on 24.3.2006 and 26.3.2006.

The second hero stone is partly broken. The broken part of this hero stone could not be located in spite of intense search. The two line Tamil-Brahmi inscription reads *[a]n̄ ūr ātan̄* in the first line and in the second line *[n̄] an̄ kal* meaning "this stone has been raised for a man (*ātan̄*) who hails from some village" (Figs. 6-8). The full name of the village and the hero involved in the act could not be ascertained due to the damage of the stone.

The third inscription reads as *vēl̄ ūr patavan̄ avvan̄*. It may be taken that "this stone was put up in memory of the *patavan̄ avvan̄* of *vēl̄ ūr*" (Figs. 9-11). The letters of the name *vēl̄ ūr* and *patavan̄* are smaller in size and those of *avvan̄* are comparatively larger in size. It seems the hero's name *avvan̄* would have been engraved first and then his village name *vēl̄ ūr* and his father name *patavan̄* would have engraved on realizing that his village name and father name is left out. One could see that the letters stands for *vēl̄ ūr* and *patavan̄* are so compressed when compared with *avvan̄* so as to accommodate them in a given space.

The last two inscriptions are datable prior to 3rd century B.C. The first inscription seems to be later than the above two inscriptions and could be dated to 3rd century B.C. The characteristic feature of the early Tamil language tradition is the separate writing of grammatical suffixes beginning with vowels without joining to the main word. This language tradition is followed in these inscriptions. Therefore, these are considered to be earlier in date. Palaeographically, orthographically and linguistically these hero stones are considered as the earliest. Therefore, these three hero stones are very important to the study of early historic period of Tamil Nadu. It is quite possible to get more such hero stones in future. Thousands of Iron Age burials have been discovered by the Tamil University team. In our recent explorations in Vaigai river valley alone hundreds of Sangam Age sites have been discovered. The present site Pulimāṅkōmbai is one among them and is located on the southern bank of the river Vaigai probably on an ancient route connecting the Chera country through Kambam pass.

The Sangam literature indicates clearly that sepulchral monuments were raised in memory of heroes and subsequently *naḍukals* or standing stones were planted as part of the burial and it has been described by more than 25 poets. The Sangam works like *Tolkāppiyam*, *Akanānūru*, *Purānānūru*, *Malaipadukadāṁ*, *Aiṅgurunūru* and *Pattinappalai* speak about hero stones in a detailed manner. The Sangam poet Sittalai Sāttanār speaks about this hero stone as "*viluttodai maravar vil idā vilntōr eluttutai naḍukal*"

(*Akam.* 53) meaning "the hero stone with letters (*eluttutai naḍukal*) raised for the heroes (*maravar*) who died pierced with arrows". Likewise, poets *Oṭālantaiyār* (*Akam.* 352) and *Madurai Maruṭhan* *Iṇāṇāṇār* (*Akam.* 269, 297, 343, 365, 387) who lived during the reign of Pandya king *Nannmāran* and *Valuti* also speak on this subject extensively. To indicate the engraving on the hero stone they used phrases like *eluttudai naḍukal* (hero stone with letters), *pēm mudir naḍukal peyarpayam patarat tōṇḍru kuyil eluttu* (ancient hero stone engraved with letters), *naḍukal kūr uli kuyinra kōḍumāi eluttu* (hero stone with letters engraved with help of sharp chisel), etc. These references clearly suggest that hero stones were installed with inscription during the Sangam Age. However, such inscribed hero stones of Sangam Age were eluding the archaeologists till date. The present discovery at last corroborates the literary descriptions.

According to Iravatham Mahadevan, the eminent expert in Tamil-Brahmi script, the writings and orthography are similar to the cave inscriptions of Mangulam. He also feels that it can be dated not later than early 2nd century B.C. Further, he emphasises that this is the earliest inscription so far found in Tamil Nadu in the sense that it could be even earlier to Mangulam Tamil-Brahmi cave inscription. It is remarkable that these hero stone inscriptions are in pure Tamil without admixture of Prakrit words. The discovery provides additional evidence for the wide spread literacy even in the remote area of Tamil country during Sangam Age.

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The other team members, Dr. M. Bavani and Mr. S. Venkatachalam, visited the site and took active part in deciphering the script. The whole village people of Pulimankombai enthusiastically helped the Tamil University team members during the field study. The author wholeheartedly appreciates the village people for their help.

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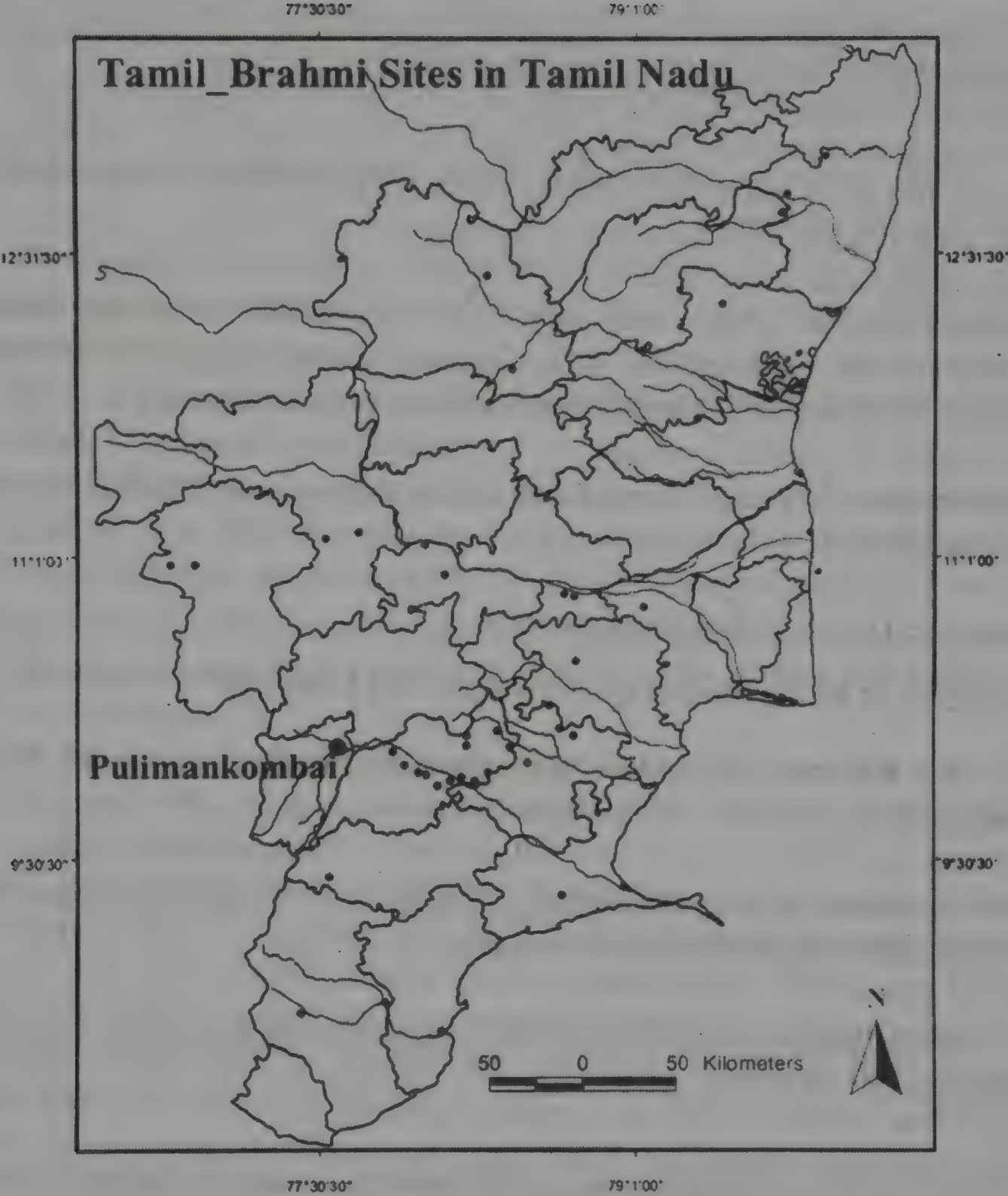


Fig. 1

Map showing the Tamil-Brahmi script yielding sites in Tamil Nadu

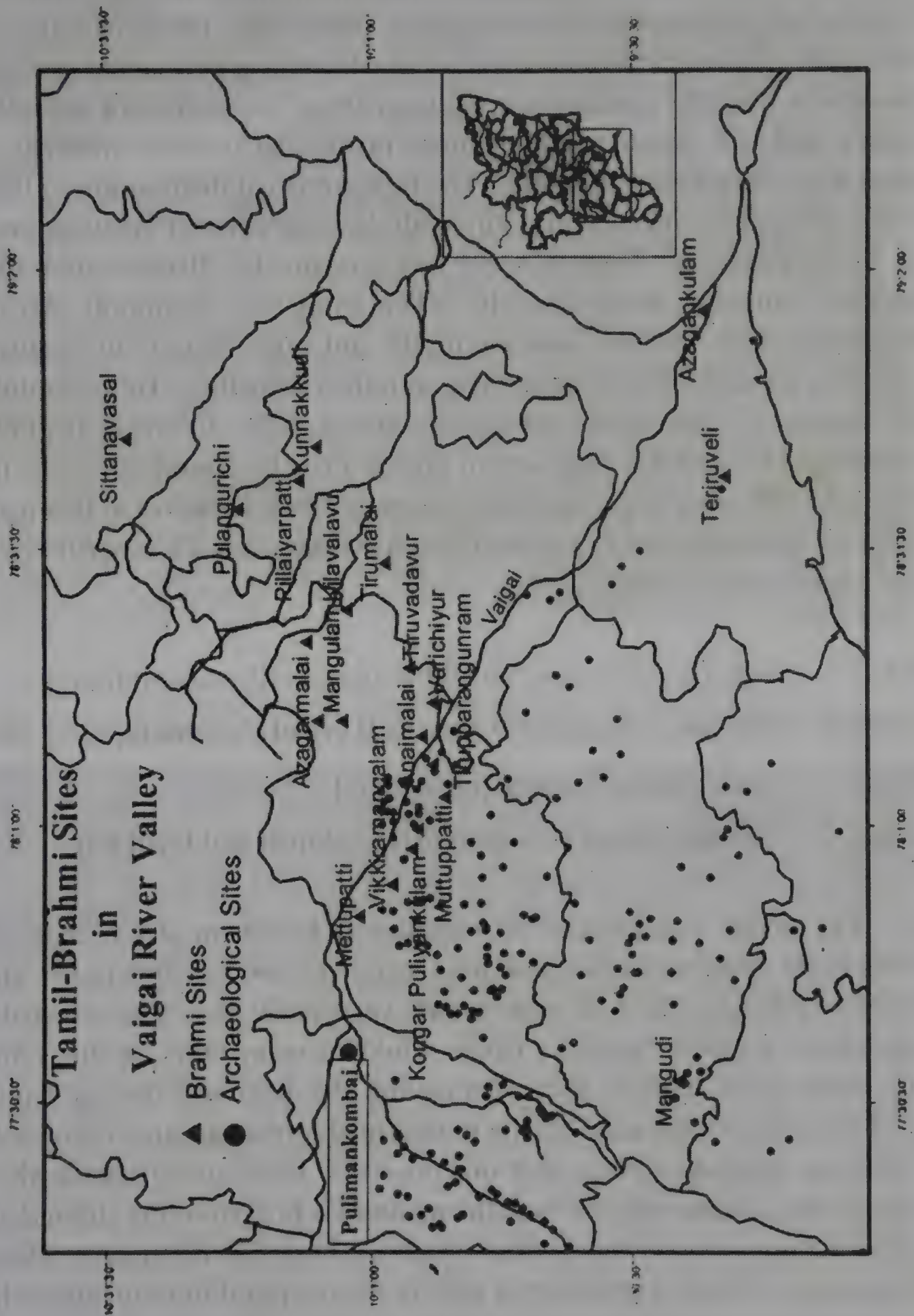


Fig. 2

Map showing the location of Pulimankombai in Vaigai river valley



Fig. 3

Pulimankombai: Inscription-1 inscribed on an undressed stone slab

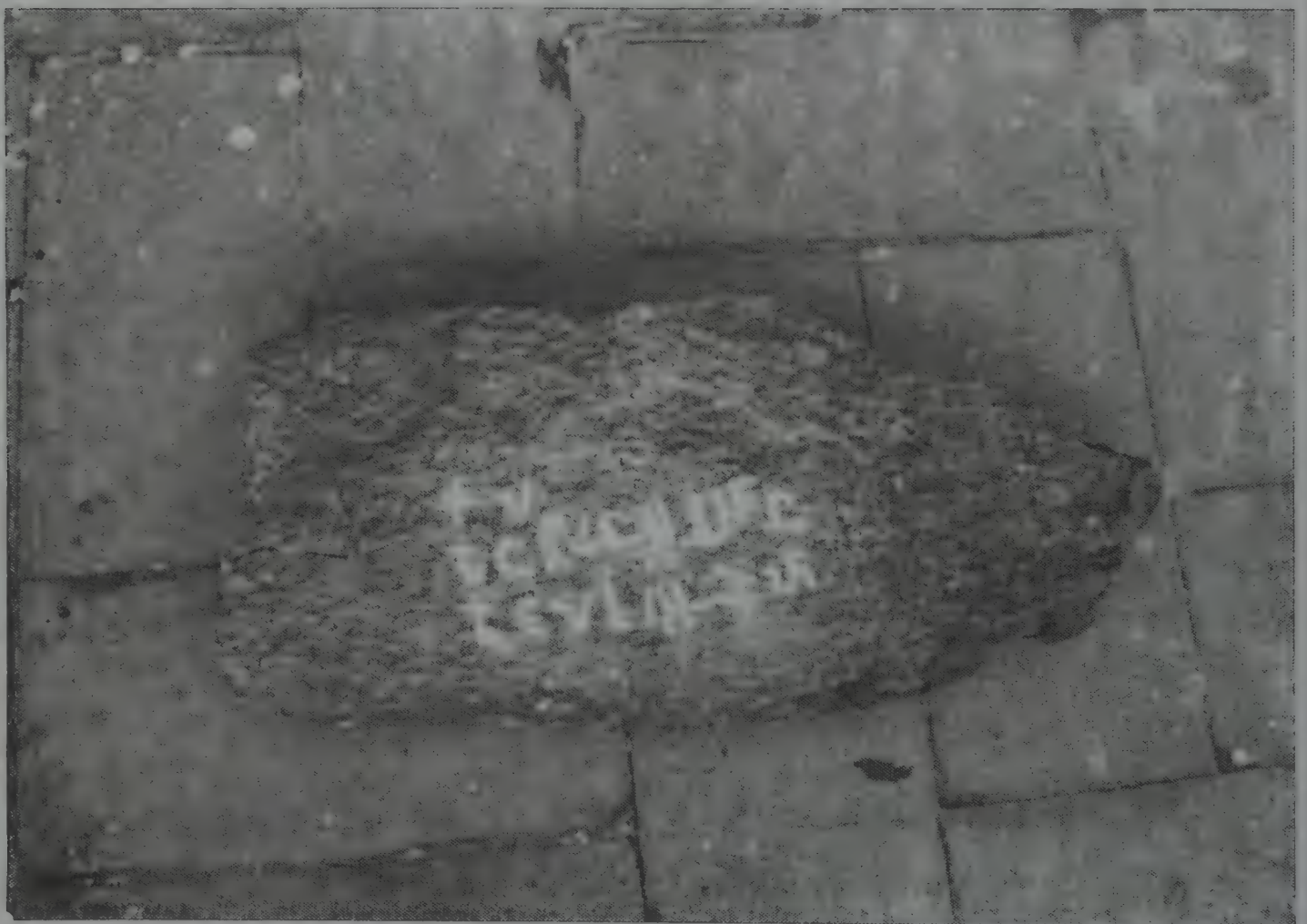


Fig. 4

Pulimankombai: Inscription-1 inscribed on an undressed stone slab

† ப
கல்
kal
பேடுதீயன் அந்தவன்
pētutīyan antavan
கூடல் ஊர் ஆகோள்
kūṭal ūr ā kōl

Fig. 5

Pulimankombai: Decipherment of the Inscription-1

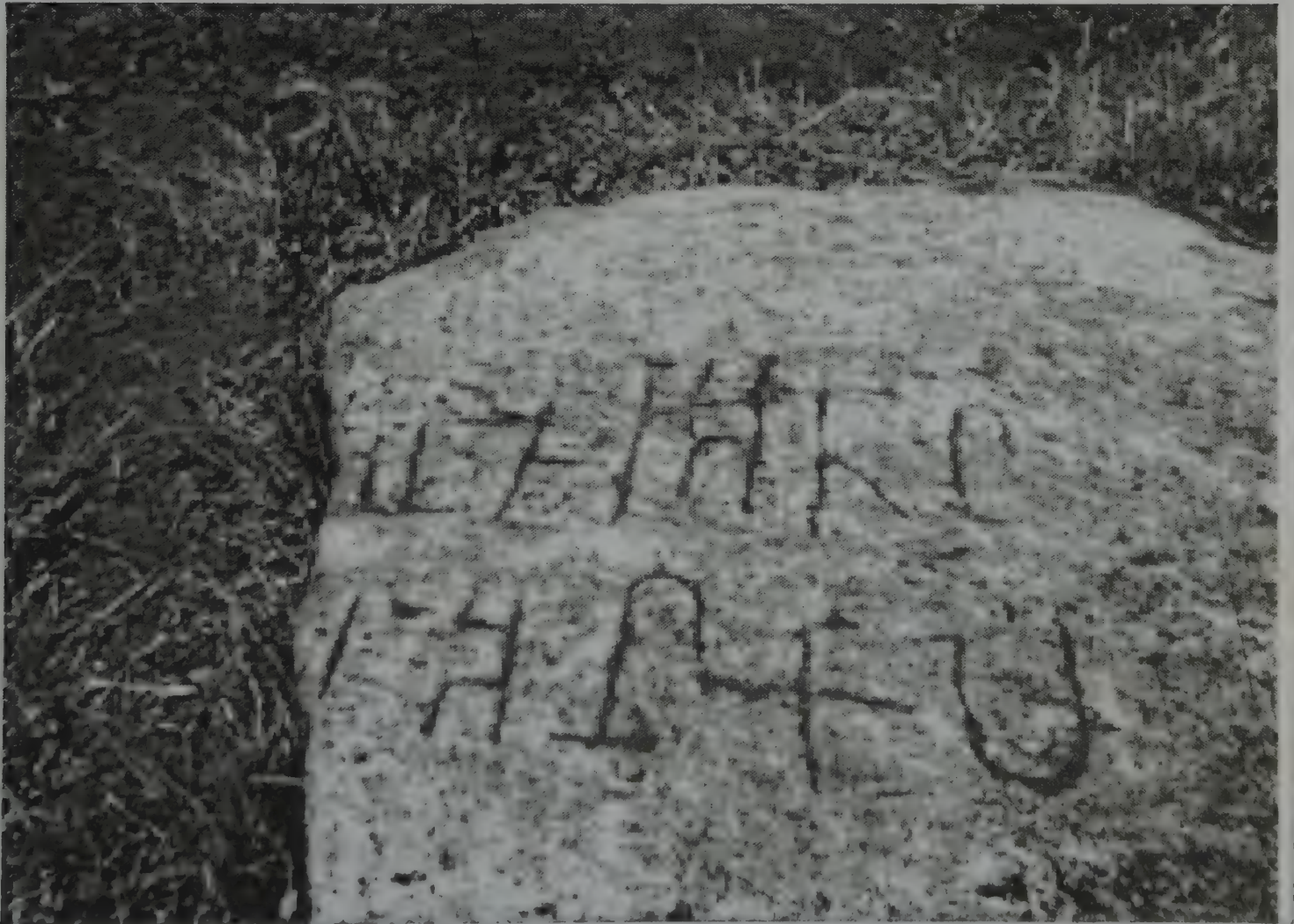


Fig. 6

Pulimankombai: Inscription-2 inscribed on an undressed stone slab



Fig. 7

Pulimankombai: Inscription-2 inscribed on an undressed stone slab

ஹஹஹஹஹ
 .. அன் ஊர் அ தன்
 an ūr atan
 ஹஹஹஹஹ
 .. ன் அன் கல்
 n a n kal

Fig. 8

Pulimankombai: Decipherment of the Inscription-2

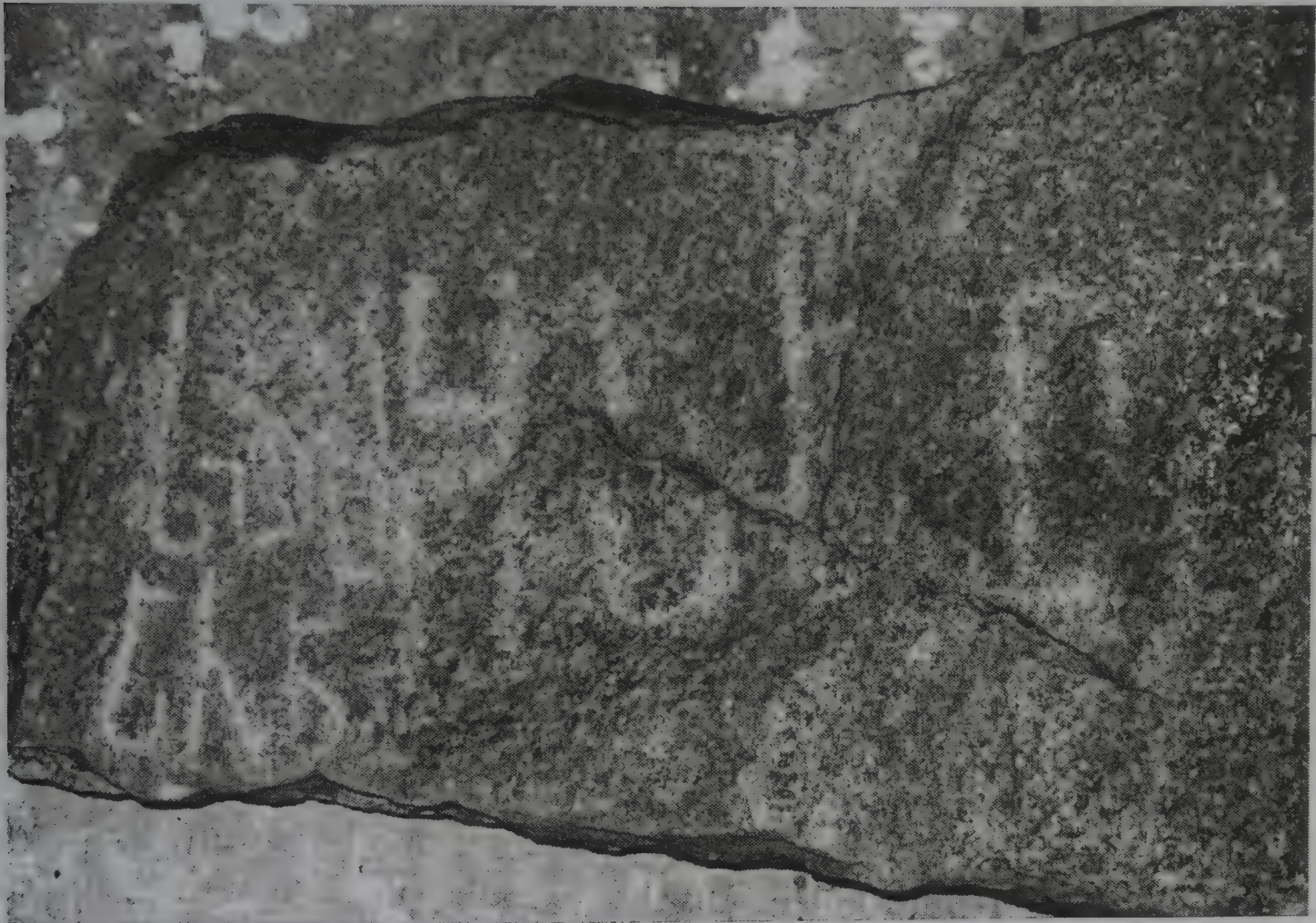


Fig. 9

Pulimankombai: Inscription-3 inscribed on an undressed stone slab

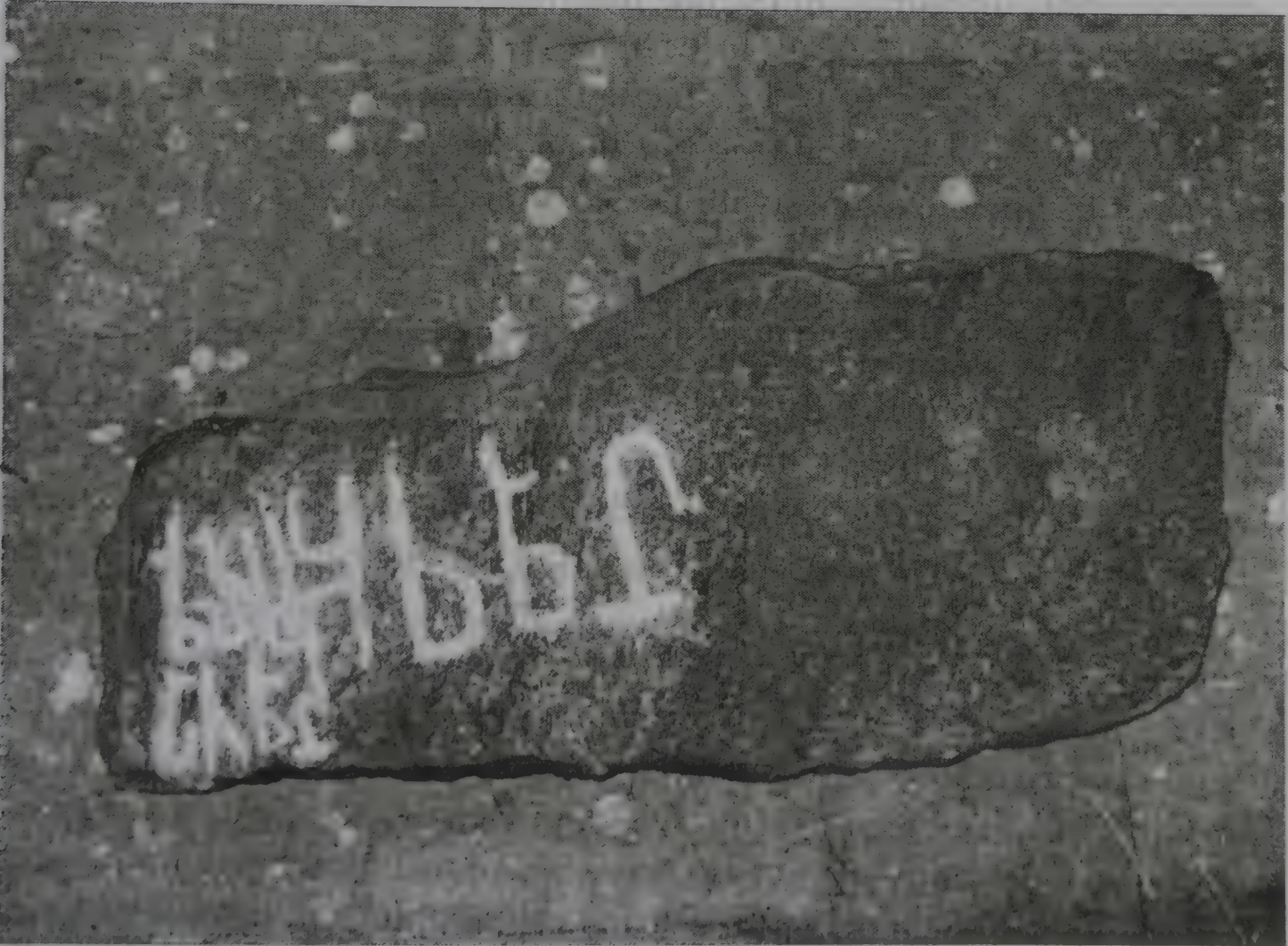


Fig. 10

Pulimankombai: Inscription-3 inscribed on an undressed stone slab

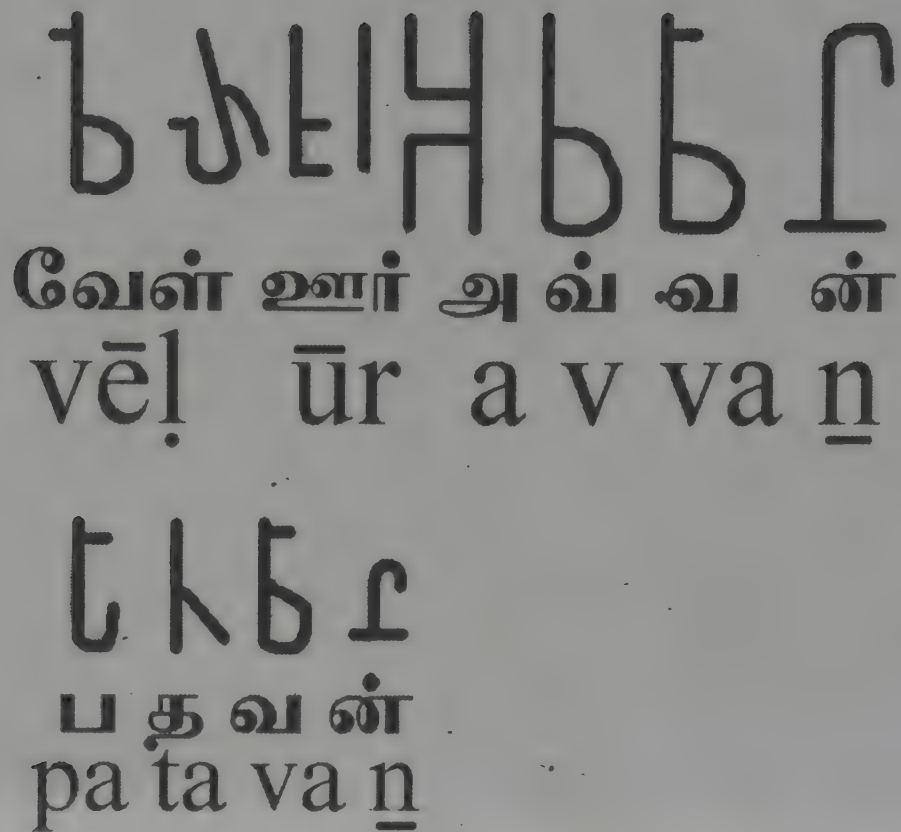


Fig. 11

Pulimankombai: Decipherment of the Inscription-3

AUTOMATIC TRANSLATION (Seminar Proceedings)

Harikumar Basi (Ed.), 1994, HB, Demy 1/8, pp. viii+200, Rs. 200/- (US\$ 40/-)

This book is a compilation of six papers by researchers and research groups actively engaged in *Machine Translation* in India. The elaborate presentation of various approaches to *Machine Translation Systems* that are already working, and ongoing projects, would benefit students and researchers in the field. Each paper is followed by discussions touching on all aspects of the problem, with active participation of linguists and computer scientists.

EVOLUTION OF BENGALI GRAMMAR

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From the origin (in the 10th century A.D.) till the middle of the 18th, the Bengali language developed without any grammar, or if any grammar was written, it has not yet come down to us. We do not have any Bengali grammar till the appearance of Manoel da Assumpsam. So from that point of view, Manoel's Bengali grammar written in Portuguese was the first Bengali grammar which was published in 1743 in Roman character from Lisbon. It is not irrelevant to mention here that some time in the 12th century A.D. (probably A.D. 1192), Pundit Damodar wrote a grammar named *ukti vyakti prakaraṇa* in the then Mahākośalī language. This grammar was written in the then vernacular in North India, Kashi in particular. It is an excellent treatise for learning the Mahākośalī language through Sanskrit. In fact, this is the first attempt for writing a grammar in a vernacular language other than Sanskrit, Prakrit or Pali.

In India, apart from Panini (4th c. B.C.), there were innumerable grammarians whose works are lost, except their names and views as recorded by later grammarians. Before Panini, we have lots of Sanskrit grammarians. Sanskrit grammar was started with the *Māheśa Vyākaraṇa* in the hoary antiquity. After that, we have *Aindra Vyākaraṇa* written by Indra, grammars of Kāśyapa, Sphoṭāyana, Cakravarmaṇa, Śākalya, Śakaṭāyana, Gārgya and many others whose names are only found in different books of grammar. Yāska (500 B.C.) in his *Nirukta* has mentioned the names of several schools of grammarians, such as Upamanyu, Kraustuki, Vāsāyana and many others whose works are not available till today, but whose views on the Sanskrit language have been recorded by him. In India, apart from Sanskrit grammar, the tradition of Prakrit and Pali grammars was also followed and in both the languages we have cartloads of grammatical literature till the middle of the 17th c. A.D. All these grammars were composed after the model of Sanskrit grammars. In fact, the reason for mentioning this history is to show that when Manoel da Assumpsam wrote his Bengali grammar, there was no dearth of historical studies in India.

In writing Bengali grammar, Portuguese people took the first initiation. They were more advanced in the expeditions of India. Under the leadership of Vasco Da Gama, a group of people first reached India (Calicut) in A.D. 1498. After that, they were spread almost all over India, particularly in the Southern part, Eastern part and also in South-West India. Gradually, they started helping the native kings in giving the military assistance in Bangladesh or Eastern India and also started doing business in India. In this way, within 16th c., Portuguese preachers made several Roman Catholic churches in different parts of Bengal. The main aim of such Portuguese preachers was to circulate their Christian religion among the native people. At that time, they wanted to acquire the native tongue just to make easy conversation with the local people. For preaching their religion, knowledge of the native language was very much essential to them. To learn the native tongue and to translate their religious books in the native language, circulating their works among the local inhabitants of the country, was the main aim of those Portuguese preachers (padres). They used to acquire the native language by mixing up with the local general public.

The original name of the oldest Bengali grammar, approved by historians also, was *Vocabulario em idioma Bengalla e Portuguez dividido em duas partes*¹, i.e. 'a dictionary of Bengali and Portuguese language, divided into two parts'. The first part contains some rules of Bengali grammar, particularly of Bengali sounds and in the second part we have Bengali-Portuguese and Portuguese-Bengali vocabularies. The author of this work was Manoel da Assumpsam and it was published in A.D. 1743. Professor Suniti Kumar Chatterji and Priyaranjan Sen translated this Portuguese text into Bengali language and published it from the University of Calcutta in 1931. This is the only Bengali edition of Manoel's grammar. The total number of pages of this book as printed is x, 137; the first ten pages give an introduction of the grammar; pages 1 to 40 are the original grammar portion, 41-137 the collection of Bengali vocabulary. Manoel was a Roman Catholic Portuguese priest. So, it may be possible that he followed the Latin grammatical system in writing his grammar in the Portuguese language.

Manoel in his grammar has given more stress on the morphology and syntax. He has discussed a little on the sound system of Bengali. Most probably, it is due to the dialectal variations and the discrepancy between the alphabetic system and pronunciation of the Bengali language, he has mainly neglected the elaborate discussion on phonology. This type of difficulty has also been mentioned by him at the end of the book. Basically it requires a very minute observation to determine the exact pronunciation of

1. This is the original name of the book, even though we simply call it Manoel's Bengali Grammar.

each Bengali alphabet. It is really a difficult task to a foreigner. So he did not discuss the Bengali phonology in his grammar as a separate section. In this matter, he normally follows the Portuguese pronunciation system and using Roman alphabet he has represented the Bengali spellings. Manoel normally followed the oral pronunciation of the East Bengali dialect, which is clearly understood in the declensional pattern. Like Latin in the declensional system, he has accepted six cases in the Bengali language. These are: Nominative (*Nominativo*), Genitive (*Genitivo*), Dative (*Dativo*), Accusative (*Accusativo*), Vocative (*Vocativo*), Ablative (*Ablativo*).² He did not mention Bengali Instrumental and Locative cases in his grammar. Manoel did not mention the plural formations of each case, except nominative plural; in his word "*O plural dos nomes Bengales nao se uza, porque he o mesmo, que o singular*"³ ('plural number is not used in Bengali, because it is like singular'). According to him, pluralization is not necessary for Bengali words, singular numbers also indicate the plurality. It is sufficient to use the singular number only. He has sometimes used a few collective Bengali words like *samsasta*, *sakal* 'all' (*loc xocol*).⁴ However, it is not the proper place to analyze critically or in detail Manoel's Bengali grammar, only a few important features are mentioned here.

Of the different types of Bengali pronominal forms, Manoel has mentioned only personal pronouns and reflexive. Use of *tucte*⁵ in second personal ablative singular form is another remarkable feature of Manoel's grammar. *tucte* is used here instead of *tomate*. Manoel's grammar is basically influenced by some regional features, and this is more particularly in the verbal forms. E.g. *tu achox* (= *tu āchas*), *tui achiti* (= *tui āchis*), *u achito* (= *se āche*), etc. However, though there are some limitations in Manoel's grammar, this type of attempt made by Manoel in learning the Bengali language is really praiseworthy.

After Manoel, the next important Bengali grammar was written by Nathaniel Brassey Halhed in 1778. The book was named as *A Grammar of the Bengali Language*.⁶

2. Normally in European languages following Greek and Latin method, the order of cases is Nominative first and Genitive second and the others followed accordingly. Manoel has also followed the same system.

3. Manoel da Assumpsam, **Bengali Grammar**, p. 2.

4. Manoel, Kripar Sastrer Arthabhed, first published in 1743, edited by Sajanikanta Das with an Introduction and note by Professor Suniti Kumar Chatterji. Ranjan Publishing House, Calcutta. 1346 B.S.

Manoel, **Bengali Grammar**, p, 5.

Nathaniel Brassey Halhed, **A Grammar of the Bengali Language**, originally in 1778, reprinted by Ananda Publishers Pvt. Limited, Calcutta, 1980.

Halhed at the time of writing his Bengali grammar knew Bengali's relationship with the Sanskrit language and occasionally he made comparisons with the English language. Halhed compared the alphabet of Bengali and Sanskrit language. He also noticed that in some cases there are certain differences in pronunciation between Bengali and Sanskrit sounds. In Bengali, cerebral *ṇ* and semi-vowel *ṽ* are pronounced as dental *n* and labial *b* respectively. About the differences between Bengali alphabet and English sounds he says "in the Bengali alphabet, all the names of the consonants commence with the respective consonants which they denote as *ko, go, jo*, etc. whereas in English, seven of them are preceded by a vowel: *ef, el, em, en, ar, ess, ex*." (Hal. p. 6). But in Bengali, short vowel is never used before it is inflected with the consonants, e.g. *ko, go*. Like Manoel, Halhed also did not consider the existence of dual and plural number in Bengali. He said that most probably these two types of number systems are not found in any modern languages, exception is found only in Arabic, Sanskrit and Greek. In Bengali, some indefinite plural forms are used to denote the plural number. For singular and also for plural, the same form of the noun is used in Bengali. E.g. *hasti hasti yuddha hay mahā yuddha kare*⁷. Here, the word *hasti* may be used both as a singular and as a plural form. Otherwise, he has also mentioned in his Bengali grammar that plurality is also formed by the addition of numerical words, or by the words having the plural sense like *dal, gaṇ*, etc. The plural inflections like *-diga, -gula* are also found in his grammar. These are mainly found in the oblique cases. He also noticed the use of *-rā* in nominative case during the middle Bengali period, though according to him, the use of this *-rā* suffix in the plural number is not only very much modern but a corrupt one also. Actually, in morphology, Halhed gave some new idea to determine the gender system of the Bengali words. According to him, if we divide the Bengali words on the basis of the gender system, then it is best to consider only two genders - masculine and feminine. He has considered neuter gender as an ordinary gender. E.g. According to him, *bāgh* is neuter or general; masculine form is *bāghā*, feminine *bāghni*⁸. In the discussion of Bengali case system, Halhed did not depend on the Sanskrit grammar. Rather, he has made some grammatical rules from the usages of local language and / or directly from the Bengali literature. He has mentioned five cases and four different types of inflections used in Bengali. The cases are: Nominative; Accusative-Dative; Instrumental-Ablative-Locative; Genitive; Vocative. According to him, *-e* is the common case-ending found in all cases. There is hardly any difference between objective (*gauna karma*) and dative case in Bengali. E.g.

7. Halhed, *ibid.*, p. 69.

8. Halhed, *ibid.*, p. 48.

*vidyāsundarere laiyā kālikā kautuki haiyā kailāsa sikhare uttarilā*⁹. He noticed that the Bengali vocabulary was enriched by the words of Arabic, Persian, Portuguese, English, etc. Therefore, according to him, the simplicity of Bengali has somehow been destroyed or reduced. While discussing many grammatical aspects, he has given references or examples to old Bengali literature through which we can assume that he had really some interest in the old literature.

Halhed while dealing with Bengali verbal forms has first mentioned some conjugational features of Sanskrit, Arabic, Greek, Latin and ultimately made a comparative and contrastive study of Bengali verbal system with the other languages, pointing out the similarities and dissimilarities. He has classified the Bengali roots into three classes¹⁰:

- i. The roots having a final vowel *-a*. E.g. *dekhan*, *cintan*. The roots having the vowel *a* attached to the penultimate consonant.
- ii. The roots possessing *-o-* vowel before the last consonant. E.g. *jāon*, *haon*.
- iii. The roots having the syllable *-ā-* attached with the penultimate letter. E.g. *ḍarāna*, *likhāna*, etc.

Though the roots are classified into three, they are not different in their formation or in structure, differences are only in the suffixes. Apart from the Bengali verbal system, Halhed has also given some new or innovative ideas in the Bengali syntactic structure in the language of Bengali poetry, etc. A detailed discussion of them is not attempted here. However, the attempt made by Halhed is really marvellous and this Bengali grammar shows a way to many foreign and native scholars for writing Bengali grammar. The other grammarians got impetus from him.

We know that after the Portuguese immigration, the Dutch, the French and finally the English people came to India or rather to Bengal. Considering the history of these European people, it is found that initially the main motive of these people was to do business here, and not to rule the country. Firstly, just for the business purpose, or rather to spread business throughout the country, they took interest in acquiring the native language. At that time, the Hindostani language which was an admixture of Hindi and Urdu, was considered as a pan-Indian language. There are many Arabic, Persian and Turkic vocables in Hindostani. In 1787, the Russian inventor

9. Halhed, *ibid.*, p. 58.

10. Halhed, *ibid.*, p. 105.

Herassim Lebedeff came to Calcutta. He learned the native tongue through the guidance of an Indian teacher and finally in 1801, he wrote *Grammar of the Pure and Mixed East Indian Dialects*¹¹. It is also known as the grammar of *Bazaar Hindostani* (see A. Bandyopadhyay, an article on Lebedeff's *Bengali Grammar*, published in *Banga Bhasha Samskriti*, pp. 29-34, 1999).

Another important Bengali grammar was published by William Carey, entitled *A Grammar of the Bengalee Language*¹². It was first published in 1801 and later, several editions were printed. In writing this grammar, Carey has taken much help from his predecessor's grammar (Halhed's Grammar). Taking hints from the Bengali grammar of Halhed, William Carey has organized his Bengali grammar in a new model. Carey has first discussed the Bengali consonants and then vowels. He has mentioned the pronunciation variations of some Bengali sounds. E.g. Bengali *c* is sometimes pronounced as *ch* and sometimes as *s*. He has also noticed that in modern Bengali *y* is pronounced as a palatal stop *j*. Bengali *a* is pronounced like the *o* sound of the English word *bottle*, but sometimes it is pronounced as *u*. At the initial position, *a* is pronounced as *aw* or *awl*¹³.

In morphology, unlike Halhed, Carey has accepted the plural number in Bengali and considered *-rā*, *-erā*, *-rān*, etc. as plural suffixes. Bengali plural forms are formed with these suffixes. E.g. *lokerā*. In the case system, Carey has followed the model of Latin grammar. He has mentioned seven cases of Bengali. These are: the agent, the object, the instrumental, the giving, the withdrawing, connecting, the possessing form. One of the most remarkable features of Carey's Bengali grammar is that he has always given examples from the colloquial usage. He has also noticed that the Bengali language has a social dialectal variation. Use of both *āmi* and *mui* as first personal forms proves the existence of social variation of the Bengali language. Similarly, for the second personal forms, he has used both *tumi* and *tui*. In fact, he has divided the Bengali pronouns into two groups. In his words, "the one used to denote superiority or honour; the other inferiority or contempt"¹⁴. This type of distinction in forms or in usages is also found in verbal forms. According to him, "Bengalee verbs are conjugated through

11. Herassim Lebedeff, **Grammar of the Pure and Mixed East Indian Dialects**, London, 1801, reprinted by Firma K.L. Mukhopadhyay, Calcutta, 1963, with a foreword by Professor S.K. Chatterji, edited with notes, biographical sketch and bibliography of writings on Lebedeff by Mahadev Prasad Saha.

12. William Carey, **Grammar of the Bengalee Language**, Serampore Press, Fifth edition 1843, First edition 1801.

13. Carey, *ibid.*, p. 5.

14. Carey, *ibid.*, p. 30.

three persons, in two forms, one agreeing to pronouns of respect and honour, the other to the pronouns of inferiority or contempt". He has noticed that Bengali verbal forms are not varied according to the number. In one word, we can say that Carey wrote his Grammar more systematically and analyzed the Bengali language more critically than Halhed.

After that, we have the Bengali grammar of Mrityunjay Vidyalankar, edited by Tarapada Mukhopadhyay. The book was first published either in 1801 or between 1807-1811. Some scholars think that it is actually the grammar of John Lyden. In fact, there is a great controversy about the actual writer of this grammar, the opinions of scholars vary from each other. Professor Nirmal Dash has raised many questions about the real author of this Bengali grammar, but finally none of the scholars solved the problem.

During the period of the second decade of the 19th century, some preliminary books were published for learning the mother tongue of the native students. These are not pure Bengali grammar books, but are practically the dictionary type (*śabdakoṣa*). One such book is *Bānān Śikṣā* written by a European Pundit, Stewart, first published in 1818. Some say that *A Grammar in English and Bengalee* of Gangakishor Bhattacharya, published in 1816, was the first Bengali grammar written by a Bengali scholar, apart from Mrityunjay Vidyalankar. Some say that this is actually an English grammar written in Bengali. From that point of view, the first Bengali grammar is *Bāṅglā Śikṣāgrantha* of Bengali Pundit Radhakanta Deb, published in 1818. He wrote this grammar following the pattern of Sanskrit grammar. In the first part, he has discussed Bengali letters, pronunciation, different types of combinations of sounds, etc. Bengali sandhi, compounds, suffixes, classification of roots, in all respects Sanskrit style has been followed.

After Radhakanta Deb, the Bengali grammar of Rev. J. Keith is worth mentioning. It was first published in 1820. Though this grammar was written by a foreign scholar, it was mainly a grammar meant for school boys. This grammar was largely question-answer type.

In 1821, G.C. Haughton published his *Rudiments of Bengali Grammar*. This grammar book is, in fact, a miniature form of the Bengali grammars of William Carey and N.B. Halhed. It was mainly a pedagogical grammar of the Bengali language for the staff of the East India Company.

Raja Rammohan Roy wrote his Bengali grammar in English in 1826 and it was translated into Bengali in 1833. The Bengali version of this

grammar is known as *Gauḍīya Vyākaraṇa*¹⁵. In this Grammar, he has accepted different aspects of Sanskrit grammar.

Like Sanskrit, he has accepted Bengali vowels like *r, r̄, l, l̄*, cerebral *n*, semivowel *v, y*. The most important point of his grammar is the case. He has accepted four cases in Bengali. Instead of using the English word 'case', he has translated it as *parinaman*¹⁶. The four cases are: Nominative, Accusative, Locative, Genitive. As there is no separate case endings for Instrumental, Dative, Ablative and as the same form is found both in Nominative and Vocative, this is also treated not as a separate case. He has used *-ke* in Accusative, though very often the suffixes like *-re, -ere* are also found. Like W. Carey, Rammohan was also quite aware of the regional variation of the Bengali language. He has also noticed that Bengali language is also varied on the pronominal forms. In discussing the various forms of Bengali, he has followed the grammars of English.

Between 1830-s and 1840-s, there were several school grammars of the Bengali language. We were not very sure about their dates of publications. In 1840, Bhagavaccandra Visharad wrote a Bengali grammar, *Sādhubhāṣār Vyākaraṇsāra Saṁgraha*. In writing this grammar, though he has mainly followed the model of Sanskrit grammar, his grammar is basically based on the English grammar. He has noticed that in Bengali, both *ṇ* and *l* are pronounced as the same. But the use of these letters may create the differences in meaning of words. He has classified Bengali pronouns, indeclinables, etc. on the model of the English language. The Bengali case systems, number, verbs and all other things have been classified following the pattern of Sanskrit. In the same year, i.e. 1840, Pundit Brajakishor Gupta also published his *Baṅgabhāṣā Vyākaraṇa*. The main difference between the two grammars is that Brajakishor Gupta in his *Baṅgabhāṣā Vyākaraṇa*, did not use any Sanskrit word or Sanskrit sutra; he has written his grammar in comparatively plain and simple language. He has used some Bengali suffixes in cases of gender, cases and verbs side by side with the Sanskritic elements. Bengali suffixes or words are totally absent in the Bengali grammar of Bhagavaccandra. He has discussed Bengali verbs, compounds and syntax also.

In 1841, Ksetramohan Dutta published his *Gauḍīya Vyākaraṇ*. This is practically a supplementary copy to the grammar of Rammohan.

15. Rammohan Roy, originally published by School Book Society Press, Calcutta. 1833. I have consulted this book published in Roy's **Granthavali**, published by Haraph Prakasani, Calcutta. 1973.

16. Actually, Rammohan has used the term 'parinam' for case in his *Gaudiya Vyakaran* under the chapter Case, but Nirmal Das has used 'parinaman' in his book, p. 143.

In 1847, Willam Yates published his *Introduction to the Bengali Language*¹⁷. Among the missionaries, Yates was the second person or real successor after William Carey. Yates' Bengali grammar is divided into two parts. The first part is the grammar and in the second part, there are some selected essays. In his Bengali grammar, there are ten chapters. These are: 1. Letter, Pronunciation, Classification of Letters, Sandhi; 2. Noun, word Formation, Gender, Number, Cases; 3. Adjective, Gender, Comparisons, Numeral Adjectives; 4. Pronouns - Personal, Relative, Interrogative, Adjectival; 5. Verbs: general features, Auxiliary, Voice, Inferior forms (subordinate forms), etc.; 6. Indeclinables; 7. Derivative words; 8. Compounds; 9. Syntax; 10. Prosody. In this respect, Yates has normally followed Carey. He has also mentioned several dialectal variations of the then Bengali language. According to him, Bengali has no standard variety. In his words, "it is much to be regretted that no standard of style exists which might serve as a pattern for imitation, ... the language, especially the written language, is not yet fixed, and elegance is at present still in a fluctuating condition". In one word, we can say that Yates was the last European grammarian who wrote a Bengali grammar following the pattern of Sanskrit. The following grammarians have all considered that Bengali has a mixed structure.

After W. Yates, in 1850 Shyamacharan Sarkar published his *Introduction to the Bengali Language*. He has discussed several items in his Bengali grammar. According to him, Bengali alphabet is more or less similar to Sanskrit, except *r* and *l*. These are found only in *tatsama* spelling; apart from this, his opinion about the pronunciation of *ṇ*, *ṣ*, *ñ*, *kṣ* is something remarkable. *ṇ* is pronounced as dental *n*; in conjuncts, it is pronounced as *t*. E.g. *kṛṣṇa* > *kṛṣṭā*¹⁸, etc. Apart from these, Shyamacharan Sarkar's grammar is quite different in all respects like number, gender, nouns, etc. from his predecessors. He has mentioned that in Bengali we have Persian words, plural suffixes, etc. In his opinion, Bengali has eight cases. In this respect, he has followed the Sanskritic pattern in Bengali. In discussing Bengali pronouns and verbs, he has followed the Sanskritic model. Occasionally, he has taken help from the Bengali native words and also from foreign vocables. In fact, he has given stress, specially on the vocabulary of Bengali. He has classified the Bengali vocabulary into *tatsama* and *tadbhava*, and also *deshi* and *videshi* (particularly Persian elements). Various types of foreign words and suffixes found in Bengali have been clearly mentioned by him. According to him, Bengali possesses a standard

17. W. Yates, *Introduction to the Bengali Language*, J. Wenger (Ed.), Baptist Mission Press, Calcutta, 1847.

18. Nirmal Das, *Bamla Bhasar Vyakaran O Tar Kramavikas*, p. 201.

form, side by side with its spoken or colloquial form. About the origin of some Bengali words, he often has agreed with the views of Professor Suniti Kumar Chatterji. E.g. According to Shyamacharan, the Bengali word *sāḍe* is derived from *sārdha*¹⁹ which is also accepted in modern times. He has elaborately discussed Bengali syntax or syntactic pattern (subject - object - verb); he has also mentioned that word-order in Bengali may also differ in sentences. He has also discussed that the vocabulary of Bengali has not only the Persian words but also some amount of Greek, Latin, French and English. In fact, he was not only a grammarian but also a linguist.

Though Vidyasagar has not written any formal Bengali grammar, his *Varna Paricay* (first and second parts) has given us ample materials to regulate the Bengali language. I am considering his *Varna Paricay* as a landmark for the Bengali language because it was he who had modelled the Bengali alphabetic system into a right order.

The other important Bengali grammars are: Mm. H.P. Shastri's *Bengali Grammar* (1882), Bengali grammars of John Beams (1891), Nakuleswar Vidyabhushan (1898), J.D. Anderson (1920), S.K. Chatterji (1939, 1942). These are discussed here.

Haraprasad Shastri in his *Bengali Grammar* has clearly mentioned that in writing a Bengali grammar, we need not depend on the Sanskrit language. As a language, Bengali is completely separate from Sanskrit. It is not plausible to analyse the Bengali language in every step with respect to the Sanskrit language. He in his *Bengali Grammar* did not consider including any rules of Bengali *sandhi* or pronunciation pattern. He did not consider dative case in Bengali. In this way, he wrote his *Bengali Grammar* in a completely new approach. He has given more emphasis on *deshi* or native *tadbhava* vocables than on the Sanskritic *tatsama* words.

After that, Saratccandra Shastri published his *Notun Bāṅgālā Vyākaraṇ*. He has considered dative case in Bengali. According to him, Bengali follows the system of Sanskrit in case of causative verbs, *kṛt* and *taddhita pratyaya*, etc. Following Saratccandra Shastri, Professor Ramendrasundar Trivedi in his article, *Bāṅgālā Vyākaraṇ*, has clearly mentioned that Bengali grammar will be made on the model of Sanskrit. Not only that, he has said that the Sanskritic or *tatsama* words are pronounced according to the Bengali language, but pure Bengali words are pronounced according to the rules of Bengali. In this respect, it is important

19. Das, *ibid.*, p. 204.

to note that in this article, he has discussed Bengali sound system, cases, suffixes, etc.

In 1891, John Beames published his *Grammar of the Bengali Language (Literary and Colloquial)*. There are five chapters in his grammar. These are: Letters, Nouns, Pronouns, Verbs and Particles. Like Sanskrit, Bengali possesses the vowels like long \bar{r} , \bar{l} and long \bar{i} . But he has also mentioned that though these three vowels are found in the alphabetic chart, actually these are not used in the language. When we want to represent the Sanskrit words in Bengali, we use these vowels. He has made some remarks on the pronunciation system of the Bengali language. E.g. According to him, Bengali *a* vowel is pronounced like the *o* sound of English words *not*, *rock*, *top*²⁰; that means it is pronounced like ɔ , but sometimes it is pronounced as *o* of *bone*, i.e. like *o*. This type of pronunciation is somewhat softer and longer. Final *-a* is pronounced in the words like *sobdo*, *bhodro*, but the Bengali word *jon* is not pronounced as *jono*. This type of pronunciation pattern is also applicable in modern Bengali. Similarly, he has also noticed that Bengali *e* is sometimes pronounced as *e* and sometimes as æ . E.g. *ek* > æk ; *dekh* > dækh , etc. *e* of these words are pronounced like the *a* of English word *back*²¹. He has also noticed that among the consonants, semivowel *y* is pronounced like palatal *j*; there is no difference between labial *b* and semivowel *v*; dental *s* in most of the cases is pronounced like palatal ʃ . He has considered eight cases and two numbers in Bengali. He has noted that post-positional words are used in the cases like Instrumental and Ablative. In general, all the modern Bengali suffixes and plural suffixes or forms that are found indicating Bengali plural numbers or adjectives, are found in his Bengali grammar. Apart from these, there are a few suffixes or words in his book which are absent in modern Bengali. E.g. the plural markers *-gulin*, *-gul*; ordinal number *thān*²² (as in *dui thān kāpad* 'two pieces of cloth') are noticeable. In the chapter of Pronoun, he has considered some colloquial or syncopated forms like *mui*, *tor*, *toke*, *tar*, etc. Colloquialism is also found in the verbal forms. E.g. *neme* < *nāmiyā*; *keṭe* < *kāṭiyā*; *peke* < *pākiyā* (p. 56), etc. In his Bengali grammar, we also have some dialectal forms like *karinu*, *karlum*, *dekhcilum*, *khaccen*, etc. The syntagmatic phonological changes like assimilation, deaspiration, devoicing are also found in his Bengali grammar. E.g. *callum*, *āscen*, *kāndite*, *māc* (= *māch*), *khapar* (= *khavar*), etc.

20. John Beames, *Grammar of the Bengali Language (Literary and Colloquial)*, Clarendon Press, Oxford, 1891, p. 5.

21. Beames, *ibid.*, p. 6.

22. Beames, *ibid.*, p. 30.

Though Pundit by profession, Nakuleswar Vidyabhushan's *Bhāṣābodh Bāṇlā Vyākaraṇ*²³, published in 1898, has a modern approach. In his grammar, Vidyabhushan practically has not discussed anything in the model of Sanskrit grammar. But with regard to the *pluta svara*, he has included it as a prolonged vowel in Bengali together with short and long vowels. He has also mentioned that no special sign is used to indicate this *pluta svara*. According to him, though in the Bengali language there are thirteen vowels, long \bar{r} and long \bar{l} are not used here. These two vowels are helpful in pronouncing the consonants only. Among the consonants, labial b and semi-vowel v , dental n and cerebral \tilde{n} , m and \tilde{m} are pronounced as the same. He has also said that the pronunciations of all the three sibilants are more or less the same. Bengali has five cases. These are: Nominative, Accusative, Instrumental, Ablative and Locative. In his opinion, the dative case is not found in Bengali²⁴. He has also said that in Bengali, like Sanskrit, there is no need of gender distinction. He has given some colloquial verbal forms in his Bengali grammar. E.g. from the root *ha*, we have *haccen*, *hacci*, *hala*, *halen*, etc.

After that, in 1939, came the first edition of *Bhāṣā Prakāś Bāṇlā Vyākaraṇ*²⁵ of Suniti Kumar Chatterji. The second edition was published in 1942. All the modern grammatical topics are discussed here. Chatterji has considered Sanskrit language as a standard, yet as a philologist, he has analyzed the Bengali language in a completely modern outlook. As his grammar is so well-known and outstanding, the details of the contents of his grammar are not presented here.

Conclusion

From a survey of the Bengali grammars mentioned above, two things appear to be very prominent. The Europeans who wrote Bengali grammars had followed the models of the grammars of their respective languages, and the Bengali grammarians who wrote Bengali grammars also followed the model of the Europeans. As a result, Bengali grammars which we find today have been written after the models of the European patterns. In the case of some definitions of grammatical aspects, sometimes the European definitions or the Sanskrit definitions are generally followed depending on

23. Nakuleswar Vidyabhushan, **Bhasabodh Bangala Vyakaran**, Calcutta, 8th edition, 1344 B.S., originally in 1305.

24. Vidyabhushan, *ibid.*, p. 48.

25. Suniti Kumar Chatterji, **Bhasa Prakas Bamla Vyakaran**, Rupa, Calcutta, 1396 B.S., originally in 1939.

the persons who are writing the grammar. But there are cases like compound (*samāsa*), cases (*kāraka*), suffixes (*kr̥t* and *taddhita*) and so on, which are generally followed on the basis of the Sanskrit model *inter alia* as Bengali. So, a pure Bengali grammar based entirely on a Bengali model is yet to be written. In this short paper, it is not possible to include the names of all the Bengali grammarians. Apart from the above, there are several other Bengali grammars whose names are not given here. In the following pages, I have given in a chronological order the list of the published Bengali grammars beginning from 1743 up to the year 1942.

No.	Year	Author	Name of the Book
1.	1743	Manoel da Assumpsam	<i>Bengali Grammar</i> , CU Press, Calcutta
2.	1778	Nathaniel Brassey Halhed	<i>A Grammar of the Bengal Language</i> , Ananda Publishers Pvt. Limited, Calcutta
3.	1801	William Carey	<i>A Grammar of the Bengalee Language</i> , Serampore
4.	1801	Herasim Lebedeff	<i>Grammar of Pure and Mixed East Indian Dialects</i> , London
5.	1807-1811	Mrityunjay Vidyalkar	<i>Bāṅglā Bhāṣār Vyākaraṇa</i> , Calcutta
6.	1818	Radhakanta Dev	<i>Samkṣipta Bāṅlā Vyākaraṇa</i> , Calcutta
7.	1820	Rev. J. Keith	<i>Bengali Grammar</i> , Calcutta
8.	1821	G.C. Haughton	<i>Rudiments of the Bengali Grammar</i> , East India Company, London
9.	1826	Rammohan Roy	<i>Bengali Grammar</i> (English version), Calcutta
10.	1833	Rammohan Roy	<i>Gauḍīya Vyākaraṇa</i> , School Book Society
11.	1840	Bhagavaccandra Visharad	<i>Sādhu Bāṅlā Bāṣār Vyākaraṇa</i> , Calcutta
12.	1841	Kshetramohan Dutta	<i>Bāṅlā Vyākaraṇa</i> , Calcutta
13.	1847	William Yates	<i>Bengali Grammar</i> , Baptist Mission, Calcutta
14.	1852	Shyamacharan Sarkar	<i>Bāṅgālā Vyākaraṇa</i> , Calcutta

15.	1862	Rajendralal Mitra	<i>Vyākaraṇa Pravesha</i> , Calcutta
16.	1865	Kedarnath Tarkaratna	<i>Vyākaraṇa Manjari</i> , Calcutta
17.	1867	Jagaccandra Chakraborty	<i>Vyākaraṇa Pravesha</i> , Calcutta
18.	1873	Kaliprasanna Vidyaratna	<i>Bāṅlā Vyākaraṇa</i> , Calcutta
19.	1875	John Beams	<i>Comparative Grammar</i> (Vols. I, II), London
20.	1877	Krishna Kishore Bandyopadhyay	<i>Saral Vyākaraṇa</i> , Calcutta
21.	1879	John Beams	<i>Comparative Grammar</i> (Vol. III), London
22.	1880	A.F.R. Hoernle	<i>A Comparative Grammar of the Gaudian Languages with Special Reference to Hindi</i> , London
23.	1880	K.K. Bandyopadhyay	<i>Bāṅlā Vyākaraṇa</i> , Calcutta
24.	1882	H.P. Shastri	<i>Bāṅgālā Prathama Vyākaraṇa</i> , Calcutta
25.	1891	John Beams	<i>Grammar of the Bengali Language</i> , London
26.	1898	Nakuleswar Vidyabhushan	<i>Bhāshābodh Bāṅlā Vyākaraṇa</i> , Calcutta
27.	1913	W.S. Milne	<i>A Practical Bengali Grammar</i> , Calcutta
28.	1920	J.D. Anderson	<i>A Manual of the Bengali Language</i> , Cambridge, New York
29.	1935	Md. Shahidullah	<i>Bāṅgālā Vyākaraṇa</i> , Dacca
30.	1939, 1942	Suniti Kumar Chatterji	<i>Bhāṣā Prakāśh Bāṅlā Vyākaraṇ</i> , Rupa, Calcutta

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ŠIKŠAAS AS SOURCE BOOK ON INDIAN PHONETICS*

H.S. ANANTHANARAYANA
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Introduction

Interest in the study of language dates back in India to the time of the Vedās. The first impulse for such a study was given, however, by the religious motive of preserving intact the sacred texts, the efficacy of which was believed to require attention to every word. Thus goes the maxim: "even one word, well understood, properly employed, will yield the intended result to the user"¹, and also, "a prayer lacking in a syllable or an accent, and wrongly employed does not bring forth the desired meaning"². It may be noted that, in both the statements, emphasis is laid on the correctness of rendering an utterance and its employment in appropriate contexts. Wrong speech was feared as "such speech, like the thunderbolt, would harm the user"³. Similarly, right speech was appreciated. We may recall in this connection a reference in the Ramayana where Rama appreciates the speech of Hanuman as "not elaborate, unambiguous, neither drawled nor uttered hastily, and given in middle tone"⁴.

The beginnings of phonetic enquiry of the Hindus may be traced to the oldest extant Vedic texts, viz. Rigveda, which devotes two entire hymns (X.71 and X.125) for a discussion on the evolution of language. The ancient Hindus recognised three stages in the development of language: i. inarticulate speech, ii. primitive articulate speech, and iii. language proper. Of the first stage, again, four grades are noted and "three among them are deposited in secret, and move not", "the fourth is the speech of human

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1. ekah šabdah samyak jnaatah suSThu prayuktah svarge loke kaamadhug bhavati.
2. manthro hiinah svarato varNato vaa mithyaaprayukto na tamartham aaha (Ps.52).
3. sa vaag vajro yajamaanam hinasti (ŠBr.1.6.3.8).
4. avistaram asandigdham avilambitam avyatham / urahstham kaNThagam vaakyam vartate madhyamesvaram# (Ramayana IV.3.31).

beings"⁵. According to the Šatapatha BraahmaNa, the first grade is represented by the hissing of the insects. This is followed in the second grade by the notes of birds, and the inarticulate speech of the brutes forms the third grade⁶. As regards the second stage, the Rigveda explains that it was first employed by men in imparting names to objects which later led to the third, viz. language proper, which was created by the wise.

Four states in the production of sound with reference to human body is recognised. The desire for production of sounds which originates in muulaadhaara is stated paraa; when it reaches svaadhiSTaana, it becomes paśyantii; at anaahata, it is madhyamaa and when it comes out of the throat, it is called vaikharii. And this last is the articulated speech.

In India, as in other ancient societies, speech is considered as the gift of God to his best of creation, i.e. man⁷. Aitareya BraahmaNa, for instance, attributes speech to Indra, the leader of gods⁸, and compares it to the ocean on account of its inexhaustible nature⁹. For preserving intact the Vedic texts, the ancient Hindus developed six ancillary works¹⁰ among which phonetics was counted at the head and was regarded as 'the nose' with reference to the understanding of the Vedic texts¹¹. In the context of drawing a distinction between the two kinds of knowledge, viz. paraa and aparaa, the MuNDakopaniSat lists the four Vedas and the six ancillary texts. They are given in the order: phonetics, ritual texts, grammar, etymology, prosody, astronomy¹². A slightly different order in the listing may be found in Aapastamba Dharmasuutra¹³. Of these, śikSaa and chandas help in preservation of correct pronunciation of Vedic texts; vyaakaraNa and nirukta help in preservation of the meaning of Vedic mantras and kalpa and jyotiSa help in preservation of Vedic rites and rituals.

The Scope of our Science

The Indian phonetic literature may be broadly divided into śikSaas and Praatiśaakhayas. The difference between the two is that śikSaa implies

5. guhaa trīNi nihitaa nengayanti; turīyam vaaco manuSyaa vadanti (RV.I.164.45).

6. ŠBr.I.3.16.

7. deviim vaacam ajanayanta devaah (RV.VIII.100).

8. vaag ghy aindrii (Ai.Br.IX.2).

9. vaag vai samudro, na vaak kSiiyate (Ai.Br.XIII.21).

10. śikSaa vyaakaraNam chando niruktam jyotiSam tathaa / kalpaśceti SaDangaani vedasyaahur maniiSiNah.

11. śikSaa ghraaNam tu vedasya (Ps.42).

12. śikSaa kalpo vyaakaraNam niruktam chando jyotiSam iti (Mu.Up.I.1.5).

13. SaDango vedah; chandah kalpo vyaakaraNam jyotiSam niruktam śikSaa chandovicitir iti.

"general phonetics" while Praatiśaakhya signified "applied phonetics". That is, śikSaa texts deal mainly with the questions of sound classification, analysis into features, general rules of pronunciation, and prosodic features (e.g. accent, quantity). In the Praatiśaakhya, we find the application of phonetics in the form of phonological rules designed to account for the sandhi phenomena manifested in the various Vedas. It is quite definite that the Praatiśaakhya postdate and to a certain extent presuppose an earlier śikSaa literature. It is, however, equally clear that no representative of this earlier literature has come down to us and that the extant śikSaa texts, with one or two exceptions, are all considerably later in date than the Praatiśaakhya.

Apart from the specifically phonetic works, numerous statements on phonetic matters are to be found in the grammatical works, more especially in PaaNini's ASTaadhyayii and Patanjali's MahaabhaaSyaa. In such ancient and non-technical works as the BraahmaNas, AaraNyakas and UpaniSads, we find familiarity with various phonetic categories, e.g. articulator, place of articulation, stop, fricative, semivowel, vowel and voice¹⁴.

As the literal meaning of the word implies, the term śikSaa for the early phonetic treatises appears to have been restricted originally to the rudimentary instruction in pronunciation. The term is defined by SaayaNa in his introduction to RigvedabhaaSyaa as "a text in which instruction is given regarding the manner of pronunciation of sounds and prosodies"¹⁵. The scope of śikSaa is first mentioned in the Taittiriya UpaniSad and included instruction in individual sounds, tones, quantity, intensity or degree of oral closure, tempo and junction¹⁶. It is clear that our ancient phoneticians were first of all aware of a fundamental distinction between segmentals and suprasegmentals; of the latter, a few of the details, and probably also intonation, since the term santaanah may mean "continuous flow of speech".

There are about sixty-five śikSaas of which thirty-three have been published and the rest are available in manuscript form in India and abroad. Some of the important ones among them are: PaaNiniiya śikSaa, Aapiśali śikSaa, Yaajnavalkya śikSaa, Vyaasa śikSaa and Naarada śikSaa. Though the total number of the Praatiśaakhya should be as many as the schools of the Vedas which are about 1130 in total, only the following few are available to us: Rikpraatiśaakhya, Vaajasaneyi Praatiśaakhya, MaitraayaNiiya

14. StaanaanupradaanakaraNam, Gopatha Br.i.24; sparśa, uuSman, antastha, svara, ghoSavat, Chand.Up.II.xxii.3-5.

15. varNasvaraadyuccaaraNapraakaaro yatra upadiśyate saa śikSaa.

16. śikSaam vyaakhyaasyaamah; varNas svarah maatraa balam saama santaanah; ityuktah śikSaadhyaayah; Tai.Up.I.2.

Praatiśaakhya, Taittirīya Praatiśaakhya, Saamatantra, PuSpasuutra, Atharvacaturaadhyāyī and Atharva Praatiśaakhya. Prof. Siddheswar Varma places the Praatiśaakhya in the period 500 - 150 B.C. and the extinct śikSaa literature between 800 and 500 B.C. It is significant that one of the extant śikSaas contains the admission, "if śikSaa and Praatiśaakhya are found at variance, the śikSaa is said to be the less authoritative". We will now examine some of the topics discussed in the śikSaas drawing data mainly from PaaNiniya śikSaa but note also where it differs from others.

Why PaaNiniya śikSaa?

PaaNiniya śikSaa (Ps) is a good specimen judged from the description provided by SaayaNa in his introduction to the RigvedabhaaSyā. Tradition ascribes the position of the Vedaanga to Ps. The work is supposed to have contained only 18 couplets in AnuSTubh metre but later on added not less than 42 couplets, mostly in the same metre. This is one of the oldest treatises on the phonetics of Old Indo-Aryan, chronologically later only to AapiśaliśikSaa (As). There is dispute regarding the authorship of the text. Madhusuudana Saraswati in the 15th century considers PaaNini to be the author of this śikSaa. Some authorities, following the tradition, have ascribed the work to the authorship of Pingala, the younger brother of PaaNini. A comparison of the contents of the ASTaadhyāyī and the śikSaa reveals, however, that the latter is also the work of PaaNini. It is believed that in its present form, it is composed later than the Muslim invasion of India.

Production of sounds

Regarding the production of sounds, PaaNini explains thus: Aatmaa with buddhi 'intellect' perceives things and sets the mind to an intention of speaking; the mind then gives impetus to the fire within the body and the latter drives the breath out. The breath circulating within the lungs creates the soft tone, in the throat it produces the middle tone, and the shrill tone in the roof of the mouth. The breath which is thus sent upwards and is checked by the roof of the mouth attains to the mouth and produces speech sounds¹⁷. The threefold distinction in the sound, viz. mandra, madhyama and taara, depending on the location where breath is held at the time, is also recognised in the VyaasaśikSaa (Vs). Aapisali explains production of sounds in the following way: the air expelled with effort from the navel region moves upwards and is held in any of the places, such as the chest. The air then striking those places produces sound. The sounds are

17. Aatmaa buddhyā sametyaarthānmanoyunkte vivakSayā / manah kaayaagnimaahanti sa prerayati maarutam# maarutastuurasi caranmandram janayati svaram (Ps.6-7).

distinguished with reference to place, articulator and effort, and are counted as being 63 in number.

Classification of sounds

Sounds are classified in Ps with reference to accent (svara), length (kaala), place of articulation (sthaana), effort (prayatna) and emission or secondary features (anupradaana)¹⁸. The last one is interpreted as 'nasality', etc. The parameter of svara and kaala characterize mainly the vowels. In As, sounds are distinguished with reference to place, articulator (karaNa) and effort. PaaNini recognises eight primary classes of sounds based on the place of articulation. They are: chest (urah), throat (kaNThah), cerebrum (širah), root of the tongue (jihvaamuulam), teeth (dantaah), nose (naasikaa), lips (oSTau) and palate (taalu)¹⁹. Aapišali counts only seven; chest is not counted as a place of articulation. The Vs recognises ten places of articulation, by distinguishing three points in the mouth, viz. beginning, middle and the end, and differentiating between the root of the teeth and the end of the teeth. Some sounds (e.g. v, ai, au) are assigned 'more than one place of articulation. Jihvaamuuliya and Upadhmaaniya are described as 'dependent on what follows'. Anusvaara and visarga are also listed as dependent sounds, but it is not clear upon what they depend. Although nose is listed as a place of articulation, no sound is specifically mentioned as having it for its place of articulation. The anusvaara is referred to once as naasikaa. Nasal stops, nasalized vowels and semivowels are termed nasalized; it may be then inferred that these sounds are intended to have the nose as one of their place of articulation. Aapišali states that nasal stops are distinguished from each other by the respective place of articulation in the oral cavity.

Articulator

Ps does not talk of articulator. As recognises only tongue as an articulator. It is divided into four parts: root of the tongue associated with the articulation of jihvaamuuliya, middle of the tongue with those of the palatals, underside of the tip of the tongue with those of the cerebrals and tip of the tongue with those of the dentals. The part near the tip of the tongue is considered optionally as the articulator in the production of cerebral sounds. Generally speaking, sthaana denotes the passive and karaNa the active organs of articulation. The sthaana is that which is approached, and the karaNa that which approaches. Some authorities have included also lower lip as one of the articulators.

8. svaratah kaalatah sthanaatprayatnaanupraadaanatah (Ps.10).

9. aSTau staanaani varNaanaam urah kaNThah širastathaa jihaamuulam ca dantaasca naasikoSThau ca taalu ca (Ps.13).

Effort or articulatory process

There are two types of effort, viz. internal (aabhyantara) and external (baahya). The former comprises processes occurring within the buccal cavity and the latter occurring elsewhere. For internal, PaaNini uses the term aasyaprayatna 'mouth process' which is interpreted by Patanjali as referring to the area from the lips to the kaakalaka. Kaakalaka is identified by KaiyyaTa as the thyroid cartilage or 'Adam's Apple' (griivaayaam unnatapradeśah). Intra-buccal prayatna may be classified into Closure or contact (sprSta) associated with the class of stops, Opening (vivṛta) associated with vowels, and Constriction or slight contact which is of two degrees: that associated with the class of fricatives and that associated with the semivowels. Of the vowels, e and o are understood as being more open; ai and au are even more so²⁰. The vowel a is a closed one (samvṛta). Fricatives are articulated in the same places as the corresponding stops; but the centre of the articulator is open. Extra-buccal prayatna is classified in three ways: i. Glottal associated with voice and non-voice; ii. Pulmonic associated with aspiration and non-aspiration, and iii. Nasal associated with nasality and non-nasality.

In their recognition of the voicing process, the Indian phoneticians make one of their greatest single contributions. The term for 'voiced' (ghoṣavat) is found in early non-technical literature. To designate the glottis, the Indians use either the word kaNTha which means simply 'throat' or more specifically khah (or bilam) kaNThasya 'aperture of the throat'. Ps links the process of aspiration with the voicing process. "h and the voiced aspirates are voiced, the semivowels and voiced stops are partly voiced; the voiceless aspirates are breathed, the voiceless stops are partly breathed. In other words, h and the voiced aspirates are considered as more fully voiced than the non-aspirates and the voiceless aspirates more fully breathed than the non-aspirates.

Prosodic features

The phonetic treatises and the grammatical works in the Indian tradition have explicitly recognised the following suprasegmental features at the word level, viz. quantity, nasalisation and accent. It may however be shown that at the phrase and clause levels, the features of juncture and intonation need also to be recognised. Duration or quantity is determined by time and accordingly, there are three kinds of vowels: short (hrasva), long (diirgha) and prolated or extra-long (pluta)²¹. PaaNini defines these terms in his grammar thus: "a vowel is called hrasva, diirgha or pluta

20. tebhyopivivṛtaavenau taabhyaamaico tathaiva ca (Ps.21).

21. hrasvo diirghah pluta iti kaalato niyamaa aci (Ps.11).

accordingly as it has the duration of short u, long uu or the extra-long vowel u3 of more than two moras". The diphthongs being long consist therefore of two maatraas which are distributed between the two vowels. According to Ps, the first element in e and o is half maatraa and the second element is one and a half maatraa. But the first and the second elements in ai and au are of the same duration, i.e. one maatraa. A close vowel is one maatraa long and an open vowel two maatraas. For this purpose, the voiced sounds are treated as closed while the breathed ones are open²².

From the standpoint of duration, human speech was said to be of three kinds, viz. quick, intermediate and slow. According to KaiyyaTa, the quantity of sound in intermediate speech was one-third more than in quick speech, the ratio being 9:12. The quantity of sound in slow speech was one-third more than in intermediate speech, the ratio being 12:16. Further, Indian grammarians prescribed the use of these three kinds of speech under different conditions. Thus, it is said that "quick speech should be used in Vedic recitals, intermediate in business, and slow during instruction".

Nasalisation

The term used for nasalisation is anunaasika and it is defined as a sound pronounced through the mouth and nose at once. PaaNini uses anunaasika with reference to nasalised vowels and semivowels as well as nasal stops. The term anunaasika is regularly used, as opposed to the śuddha or 'pure' non-nasalised vowels. Another term which is used by some of the treatises is rakta 'coloured', nasalisation being referred to as raga or ranga 'nasal colour'. Anusvaara was differently understood. According to one view, it is a pure nasalised vowel. PaaNini speaks of the anusvaara as a sound into which m is changed before a consonant.

Accent

Accent is found marked only in the Vedic texts and it is functional there. The Vedic accent termed 'svara' was musical, with pitch as essential component. We may support this conclusion from the nomenclature used to represent it; udaatta 'raised', anudaatta 'unraised'. Three tones are distinguished, generally referred to as acute 'udaaatta', grave 'anudaatta' and circumflex 'svarita'²³. Although the authorities are not unanimous in

22. ardhamaatraa tu kaNThyaa syaadekaaraikaarayorbhavet / okaaraukaarayormaatraa tayorvivrtasamvrtam# samvrtam maatrikam jneyam vivrtam tu dvimaatrikam / gho-Saa vaa samvrtāah sarve aghoSaa vivrtaah smrtaah# (Ps.19-20).

23. udaattaścaanudaattaśca svaraastrayah (Ps.11).

their description of svarita, we may define it as a combination of the other two tones. The first half of it is udaatta and the latter part of it is made to fall. There are two types of svarita: independent which is not preceded by an udaatta and dependent which is always preceded by an udaatta. The independent svarita is generally explained as the result of a coalescence of an udaatta with an anudaatta syllable. When this coalescence takes place within a word, the word will have svarita as its main accent. Few words are found with this type of accent. Words are characterised as having nine types of accentuation: final being acute (e.g. agnih), initial being acute (e.g. somah), acute alone (e.g. pra), grave alone (e.g. vo), low circumflex (e.g. viiryam), middle being acute (e.g. haviSaa), circumflex alone (e.g. svah), two acute accents (e.g. brhaspatih) and three acute accents (e.g. indraa brhaspatih).

Not only speech sounds are described and classified, there is also instruction regarding correct pronunciation of individual sounds as well as connected speech. It is said that one should pronounce the speech sounds carefully as the tigress carries her cubs between two rows of teeth, carefully, lest they should either be dropped or bitten²⁴. True to its being a vedaanga śikSaa, it provides detailed instruction regarding the recitation of vedic passages.

Thus, it may be seen that the ancient Indian phoneticians had excelled the forerunners of the Western tradition. Prof. Emeneau (1955) has all praise for the achievement of Hindus in this field. He writes, "They became very exact phoneticians at a time when all other peoples either had made no advances in this direction or were only the most hopeless fumblers. Their phonetic handbook (viz. Praatiśaakhya) to the Veda is warrant that three millennia have produced only the most insignificant of changes in the text and the pronunciation of the text". Allen (1953) considered the early Western terminology in phonetics as 'grotesque' and 'inadequate'. The contribution of Sanskrit phoneticians to Western phonetic thought is considerable. While writing on Sir William Jones, J.R. Firth (1946) states: "without the Indian grammarians and phoneticians whom we introduced and recommended to us, it is difficult to imagine our nineteenth century school of phonetics". Such is the greatness of Indian tradition and as inheritors of this tradition we do well in cultivating and keeping it alive.

24. vyaaghrii yathaa haret putraan damSTraabhyaam na ca piiDayet / bhiitaa patanab-hedaabhyaam tadvad varNaan prayojayet# (Ps.25).

SIMILARITIES IN SINDHI AND DRAVIDIAN LANGUAGES*

PARSO J. GIDWANI

I

A BRIEF POLITICAL HISTORY OF SINDH

Sindhu, the river, Sindh the region and Sindhi, the language has not only always received the attention of kings and traders but also of historians, linguists, archaeologists and scholars from almost all domains of existence. The first ever recorded sacred hymns of the Rgveda, recited the beauty and might of the Sindhu river. In the Rgveda, the earliest of all the four Vedas, the Sindhu river appears 21 times in the tenth mandal and there is no reference even once to the Ganga and the Yamuna. According to H. Oldenberg, the writers of the Vedas had 'not yet reached their later abode in the two powerful sister streams, the Ganges and the Yamuna; the Sindhu [Indus] was still for them the 'Mother Stream', of which one of the oldest poets of the Rig Veda says:

'From earth along the reach of Heaven riseth the sound

Ceaseless the roar of her waters, the bright one.

As floods of thundering rain, poured from the darkened cloud-bosom

So rushes the Sindhu, like the steer, the bellowing one'

(H. Oldenberg, p. 20).

This is the river Indus from which India gets its name, in the bosom of whose valley the ancient civilization left its marks to be excavated and named Mooan-jo-daro. This site, an archaeological marvel, excavated in the 1920's, proved to the world that India did have a rich ancient civilized past. Sir John Marshall, Director of the Archaeological Survey of India, on the discovery of the excavated site in 1924 states, "Hitherto India has almost universally been regarded as one of the younger countries of the world"

* This unpublished paper of Parso J. Gidwani sent by his daughter Charu P. Gidwani is now published posthumously.

Now, at a single bound we have taken back our knowledge of Indian civilization some 3000 years earlier and have established the fact that in the third millennium before Christ and even before that, the peoples of the Punjab and Sindh were living in well-built cities and were in possession of a relatively mature culture with a high standard of art and craftsmanship and a developed system of pictographic writing" (Khanna, pp. 24-25).

"When the great cities of Harappa and Mohen-jo-daro were discovered in the 1920's the history of the Indian subcontinent attained a new dimension. The discoveries of these centres of the early Indus civilization were certainly major achievements of archaeology. Before the centres were known, the Indo-Aryans were regarded as the creators of the first early culture of this subcontinent. The Vedic Indo-Aryans had come down to the Indian plains in the second half of the second millennium B.C. But the Indus civilization proved to be much older, reaching back into the third and fourth millennia" (Kulke & Rothermund, p. 19).

Who were the early inhabitants of Mooan-jo-daro is a question that has preoccupied many a scholars' mind. According to R.C. Hiremath, the Mooan-jo-daro and Harappa sites belonged to the 'Pre-Aryan Dravidians' and it was an 'advanced civilization'. He states that "the finds of Mohen jo daro and Harappa have proved that a very advanced state of civilization existed in Sindh and the Punjab during the Pre-Aryan-days But the Pre-Aryan Dravidian civilization was by all means of a very high standard" (Hiremath, p. 64).

That the civilizations were of an advanced culture apparently is nowhere doubted. According to S.K. Chatterjee, "The pre-Aryans of Mohen jo-daro and Harappa were certainly in possession of a higher material culture than what the semi-nomadic Aryans could show" (Majumdar, p. 160).

The culture of Sindhi rural folk still carries the marks of the ancient civilization of the Mooan-jo-daro. The custom of wearing bangles by the women in Mooan-jo-daro, as seen in the excavations is still kept alive in Kutch by the Sindhi-speaking tribes of the Koli, Menghwals, Jats, Sodhas and Odhs. The Bull found on the seals of the Mooan-jo-daro has horns that curve inward, to form an incomplete circle; similar shape of Bulls' horns is seen in India even today, where non-immigrant Sindhi speakers (refer to Appendix) are present in hundreds of villages bordering Sindh particularly in the Kutch and Banaskantha districts of Gujarat, Barmer and Jaisalmer

districts of Rajasthan. The Banni region of Kutch bordering Sindhi-speaking area of Pakistan is purely a Sindhi-speaking area that has preserved the culture of Sindh. The wind instrument, Borindo, excavated from Mooan-jo-daro is still played in Sindh and Kutch.

What were the origins of the people inhabiting the Indus Valley that marked a great civilization of mankind? Where had these inhabitants come from? There seems to be little doubt that the Dravidians did inhabit the Indus Valley.

Suniti Kumar Chatterjee in his book, *The Origin and Development of the Bengali Language* states "the latest theory about the origin of the Dravidians is that they belong to the Mediterranean race, that they lived for sometime in Mesopotamia, and by the pressure of the Akkadians or the Semites, they pushed into India by way of Baluchistan (where the Brahui language marks their presence), and spread along the Indus and Ganges valleys before passing into the south and absorbing there the primitive Negrito and proto-Polymesian population" (Chatterjee, p. 28).

S.K. Chatterjee in *Modern Review* (December 1942) later states the possibility that ".... civilization first arose in India and was probably associated with Dravidians. Then it was taken to Mesopotamia to become the source of Babylonian and other ancient cultures". But this hypothesis is yet to be proved. Scholars, at least in Linguistics, are yet divided over the opinion of whether the Indus Valley was the seat of Dravidians or not.

To quote R.C. Hiremath, "The question whether Mohan-jo-Daro and Harappa civilization belong to the Dravidians or not is still controversial" (Hiremath, p. 64). That there was a relationship, may be only restricted to trade, between the inhabitants of the Mooan-jo-daro and Mesopotamia has been archaeologically established. "More evidence for this international trade was found when seals of the Indus Culture were found in Mesopotamia and other seals which could be traced to Mesopotamia were discovered in the cities of the Indus" (Kulke & Rothermund, p. 20). Was this relationship only extended to trade or was it more intense, is yet to be proved.

Later Inhabitants and the History of Sindh

Sindh in the Epics

It is not only the Vedas or the Mooan-jo-daro that mark the civilization of Sindh. The two great epics of India, the *Ramayana* and the

Mahabharatha, also make a mention of Sindh. In the *Ramayana*, Ram's brother Bharat was given the charge of Sindh. Bharat had two sons, Taksha and Pushkar. The Takshasila therefore is the ancient part of Sindh which Taksha was given charge of. In present-day Rawalpindi, the ruins of the University at Takshasila are found. This is the birthplace of the first Sanskrit grammarian, Panini. In the *Mahabharatha*, the Pandavas at one point fought a battle with Raja Jayadrath, the Raja of Sauvira, which was a part of ancient Sindh. This Raja Jayadrath fought for the Kauravas, was defeated by the Pandavas and consequently, Sindh went to the Pandavas.

Buddhism and Jainism in Sindh

Huan Tsang, the Chinese pilgrim, makes a mention of Buddhism in Sindh and the river Sin-tu (Sindhu) in his travelogue. There is other evidence of Buddhism in Sindh too. "A ruined Buddhist stupa, a reliquary dating from the second century A.D. can be seen on its (the mound's) top from miles around" (*The Penguin Encyclopaedia of Ancient Civilizations*, pp. 178-179).

Rao Bahadur K.N. Dikshit, Formerly Director General of Archaeology, the Government of India, refers to "Mr. R.D. Banerji, excavating the ruins of a Buddhist establishment at Mohenjo-daro in Sindh" and to "a few Buddhist stupas and monasteries, mostly assignable to the Gupta period as at Mirpur Khas" (Sindh) (Majumdar, pp. 71-72).

Compared to Buddhism that was widespread in Sindh, Jainism made its mark only in Southern Sindh. Some Jain temples can be found in Tharparkar, Tando, Alhyar, Hala, Thatta and other places in Sindh.

Aggressions and Attacks on Sindh

The aggressions and attacks on Sindh that records of history show have also been significant in moulding the language and culture of Sindh. Alexander attacked Sindh in 327-325 B.C. He appointed two governors in charge of Sindh. When the news of his death reached Sindh, the people of Sindh drove away the two governors. This was soon followed by the attempt of invasion of Sindh by Seleucus Nicator in 305 B.C. but he too faced tough times and soon entered into a peace treaty with Chandragupta. This was followed by the rule of people from diverse regions of the world. There was the rule of two Greek dynasties - one by Euthydemus till about 156 B.C. and another by Eucradites till about 20 B.C. Then there were the Scythians, Parthians, Kushanas and Huns.

The Arab Conquest

In the beginning of the 8th century A.D., Sindh was ruled over by a Brahmin king Raja Dahir. He was defeated by the Arab general Mohammed Bin Quasim in A.D. 712. With this the influence of Islam and the Arabic language on Sindhi started. The Arabs retained a strong hold over Sindh for about three hundred years. As they weakened, however, various dynasties started becoming more and more powerful.

The Soomras and Samas

The dynasty to take over the reins of Sindh from the Arabs was the Soomra dynasty. Soomras held power over Sindh from about A.D. 1053 to A.D. 1400, i.e. for about 350 years. The Soomras are believed to be Parmar Rajputs found even today in Rajasthan, Saurashtra, Kutch and Sindh. *The Cambridge History of India* refers to the Soomras as "a Rajput dynasty the later members of which accepted Islam" (p. 54). The Sama dynasty followed the Soomras. The Samas were in the army of the Soomras and later took on complete power over Sindh. They ruled Sindh from about A.D. 1351 to A.D. 1521. The Jadeja Rajputs of Rajasthan, Saurashtra and Kutch claim to be descendants of Samas. *The Cambridge History of India* refers to the Samas as "a Rajput tribe of Cutch and lower Sindh" (p. 500). Further, "those of the Samma tribe who remained in Sindh accepted Islam," (p. 518).

The Arghun, Tarkhans, Kalhoras and Talpur Mirs

The Sama rule in Sindh was followed by the rule of the Arghun (Muslims) dynasty, that took over the rule of Sindh in about 1521. The Arghuns were followed by the Tarkhans in 1554. The Moghul emperor Akbar sent his troops to Sindh in 1590 probably to prevent a Safavid invasion from Persia. Sindh was then ruled by Moghul governors for almost two centuries. In 1737, due to the decline of the Moghul Empire, the Kalhoras ruled Sindh as independent rulers. They were defeated by the Talpur (Mirs) in 1783 who then ruled over Sindh till their defeat at the hands of the British.

In 1843, the British defeated the Talpurs and took over the control of Sindh. The Arab conquest and Muslim rule in Sindh lasted for about 1,100 years. Obviously, the Arabic language and Islamic religion had had plenty of time to leave their indelible impressions on the language and culture of Sindh.

The Golden Period of Sindhi Literature

The period from 1500 to about 1850 was the richest period of Sindhi literature; this was the time when Sindhi poetry flourished and spread an eternal fragrance over Sindhi life. Interestingly, this literature is almost all steeped in Sufism that had a strong grip over Sindh and even today continues to impress the Sindhi frame of mind. Qazi Kadan (d. 1551), Shah Abdul Karim (1536-1623), Shah Inat of Nasrapur (d. 1709), Shah Inayat Jhok (1656-1718), Saheb Dino of Daraz (1689-1788), Mian Isa (d. 1742), Shah Abdul Latif (1689-1752) who was the great great grandson of Shah Abdul Karim, Sacal (1739-1829), grandson of Saheb Dino of Daraz, Makdhum Abdul Rahim Grohri (1739-1778), Muhammad Zaman Lawari (1713-1774) and Chainrai Sami (1743-1850) are some Sufi poets whose writings contribute to the rich heritage of Sindhi literature.

Shah Abdul Latif's writings, compiled in Shah-Jo-Rasalo, reflect his genius as a poet with the devotion of a Sufi not easy to parallel. His works, as also the works of Sacal and Sami, continue to occupy reverend niche in the heart and soul of any true Sindhi. The language in these writings is heavy with the Arabic and Persian influence.

Commenting on the literature of Sindhi, Richard Burton (1851) wrote, "As regards the literature of the Sindhi tongue, it may safely be asserted that no vernacular dialect in India, at the time of our taking the country, possessed more and few so much, original composition" (Burton, p. 75). The British rule which came after this lasted for about a century, till the independence and simultaneous Partition of India, 1947. The cruellest blow that the people of Sindh could ever receive was the Partition of India by the British leading to the uprooting of multitudes of Sindhi Hindus from Sindh. With every invasion the language obviously underwent degrees of change to evolve into the present-day Sindhi.

II

DIFFERENT OPINIONS OF SCHOLARS ABOUT THE SINDHI LANGUAGE

Sindhi is the language of Sindh. George Grierson states that "Sindhi is spoken in the province of Sindh and also beyond its frontiers in the adjoining areas in the North in Baluchistan and the Punjab, in the East in Rajputana, in the South in Cutch and in the West in Las. Sindhi has five dialects, viz. the standard (or Vicholi), Thareli, Lari, Lasi and Kachchhi.

The so-called Siraiki Sindhi, i.e. the Sindhi spoken in the Upper Sindh differs from the standard Sindhi only in having a more clearly articulated pronunciation, and a slightly different vocabulary.

The standard or Vicholi dialect of Sindhi is spoken in the country around Hyderabad. This dialect is employed in literature and by educated people all over Sindh. Thareli is spoken in Tharu or Registan, i.e. the desert on the Eastern border of Sindh, separating it from the Marwar State of Rajputana. To the southwest of Vicholi and separated from the district of Karachi by the hill country of Kohistan lies the territory of the Jam of Lasbela. Here Sindhi, Brahui and Balochi are spoken by various tribes. The Sindhi spoken here does not seriously differ from Vicholi, but has some signs of the influence of the Lari spoken in Karachi, and also has a few peculiarities of its own. To the south of the Vicholi is the Lar or lower Sindh. Lari, the dialect of this area, is quite distinct from Vicholi. South of Sindh lies the peninsula of Cutch. Here we have a meeting place of several forms of speech, Sindhi, Marwari and at least three dialects of Gujarati. The dialect of Sindhi is called Kachchhi, and it is spoken not only in Cutch, but also in the neighbouring peninsula of Kathiawar" (Grierson, pp. 682-684).

According to Ernest Trumpp, "the Sindhi, which is spoken within the boundaries of Sindh proper, is divided into three dialects, which grammatically differ very little from each other, but offer considerable discrepancies in point of pronunciation. The dialect of lower Sindh, comprising the Indus-Delta and the seacoast, is called lari, from laru, by which lower Sindh is designated. The dialect, which is spoken north of Haiderabad, is called siraiki, from siro, by which Upper Sindh is designated; the dialect in vogue in the Thar, or desert of Sindh, is called thareli, from tharu, the desert." (Trumpp, pp. II).

Lambrick states, "Standard Sindhi, the literary language, is that spoken in Vicholi, the central area of the modern province. In addition, there are five regional dialects or forms of Sindhi: Siraiki spoken in Upper Sindh and Kachhi, Thareli or Dhatki in the eastern desert areas, Lari in the Delta of the Indus and the coastal areas, Kachchhi in the peninsula of Cutch, and Lasi, near Karachi and in the South of Las Bela" (Lambrick, p. 223). Time moving ahead on its course mitigated and reframed boundaries; in the process Sindhi lost many of its strict dialectal peculiarities and imbibed new characteristics of varying influences.

The Partition of the Indian sub-continent into two sovereign states, India and Pakistan in 1947 dealt a severe blow to the Sindhi community and

to the Sindhi language. The entire province of Sindh went to the newly created West Pakistan (now only Pakistan). About a million Sindhi Hindus had to leave Sindh and come to the newly defined boundaries of India as refugees. They were put up in refugee camps in various parts of India, the main concentration being in Maharashtra, Gujarat, Madhya Pradesh, Rajasthan, Uttar Pradesh and the Union Territory of Delhi. Since then Sindhi is spoken in these states and some cosmopolitan cities like Madras, Hyderabad, Bangalore etc. It is one of the languages that came to be recognized in the eighth schedule of the Indian Constitution on 10th April 1967. It continued to be an official language in Pakistan because the state of Sindh was rooted there.

G.A. Allana, eminent Sindhi scholar says, "Sindhi is one of the major languages of Pakistan. It is spoken in the province of Sindh by approximately 11 million people. It is spoken also by approximately 2,00,000 as their first language in Tanzania, Kenya, Nyasa Land, Zimbabwe, Congo, South Africa, Madagascar and in U.K., U.S.A. and Canada by migrants from Uganda and other parts of East Africa. It is also spoken by a great number of people in Hong Kong, Singapore, Manila, Bangkok, Colombo, Java, Sumatra and in some other parts in South East Asia, particularly by those traders who have settled there through generations" (Allana, pp. 306-307).

Sindhi has rich classical poetry dating back to the 12th century A.D., unfortunately though due to unabated foreign aggressions much of the literature on Mathematics, Astronomy, Astrology, Medicine, Arts and Crafts is almost lost. History bears witness to diverse aggressions and attacks on Sindh which obviously left indelible impressions on the language, culture and religion of Sindh.

The English Influence on Sindhi

The most recent foreign influence on Sindhi has been the rule of the British. During the British rule the Sindhi language was encouraged and developed, along with the development in several other spheres of life. The roads, rail, postage, etc. were started in Sindh. The first postal stamp named Scinde District Dawk was started in Sindh on 6th May 1852. The British constructed dams, a big network of canals and the Karachi port which is a highly developed seaport of the present Pakistan. Within 15 years of their rule over Sindh the whole lifestyle of the people of Sindh changed drastically. Administration, food, dress, house-decorations, communication,

everything underwent heavy influence of the British; with the industrial revolution in Europe, Sindh also could not remain isolated. Manufactured goods soon replaced the native industry and with these a whole chunk of Sindhi vocabulary was buried in the past. The influence of the English in the last 30 to 40 years is so much that even the word for 'mother' which is the closest relation of a person is now 'mummy' or 'mum'. Original terms like ama~, ami~, amar and a:yal remain to be seen only in books or dictionaries. Words of every sphere of life entered into Sindhi language. Some words are even beyond recognition. For example, Sindhi word kab'aTu is English cupboard, Sindhi word D'amecu is English damaged. Some words are hybrid forms, like na:pa:s meaning fail. Here, na: (meaning 'no') is a Sindhi prefix attached to the English pass. Thus, the meaning of na:pa:s is one who has not passed, i.e. one who has failed.

The Persian and Arabic Influence on Sindhi

Prior to the advent of the British, it was the Arabs who had complete control of Sindh. The impact of the Arab invasion and the Muslim rule for about eleven hundred years in contrast to the British dominance of a century has obviously left a deeper mark on the language of Sindh. Even during the rule of the Muslims Sindhi was never used as an official or court language. Muslims used Arabic and Hindus used Sanskrit for their religious purposes. Number of Sanskrit knowing was very insignificant, but Arabic knowing were plenty. Persian was not only the official and court language of the rulers of Sindh but it was also the main vehicle for all literary and scholarly pursuits.

Aitkin states, "Persian was the language of literature and business, and not only Musalmans, but Hindus who hoped for government service, acquired it Sindhi was language of common life among all, from the Mirs to the Maulanas, and though it was not considered a fit vehicle for learning, or polite correspondence, the Hindu traders kept their accounts and carried all their business in it" (Aitkin, pp. 472-473).

The contact of Persian with Sindhi is very old. According to Ayaz Qadri, "when the Arabs conquered Sindh in A.D. 712, there were some Persian soldiers also and with their presence Persian contact with Sindhi started. This contact continued up to A.D. 1843 when the British conquered Sindh. During the long period of 1100 years, Persian was the main vehicle for literary pursuits and scholarly writings in Sindh. Dr. Allana has given a long list of writers and poets who wrote in the Persian language" (Gidwani, p. 35).

The influence of Arabic on Sindhi is apparently of a greater magnitude compared to the English and Persian influence. According to Allana, Sindhi assimilated within itself common Arabic words and "many words connected with religion, science and philosophy of Islam were commonly borrowed from Arabic" (Allana, p. 312). Further very importantly he states that "the present Arabicised writing system of Sindhi language has also influenced much the language and socio-cultural life of Sindh. Thousands of modern Arabic and Persian words and phrases have been added to the dictionary of Sindhi language" (Allana, p. 320).

According to R.F. Burton, "The Arabic language is known to the learned Musalmans" but it was not "commonly spoken" (Burton, p. 58). Sindhi was the language of common speech. According to Aitkin, ".... Sindhi was language of common life among all," (Aitkin, p. 472). Sindhi also shows some influence of Pali, a consequence of the preachings of Buddhism in Sindh.

Origins of Sindhi rooted in Mooan jo daro

Sindhi - an Indo-Aryan language

The Sindhi language has, ever since the excavation of the Indus Valley site, been the preoccupation of many a linguist's mind and there have been various opinions about the Sindhi language and its origins. Burton is of the opinion that "The Sindhi is superior to most of the dialects of Western India in various minor points of refinement and cultivation The Sindhi language, again, is remarkable for a copiousness and variety of words," (Burton, p. 75).

H.T. Lambrick states, "The Sindhi language, according to the accepted scientific classifications belongs together with Landha or Western Punjabi to the North West group of the outer circle of Indo-Aryan vernaculars. The two tongues show a strong connection with the Dardic languages further to the North, especially with Kashmiri. Like other modern languages of the Aryan family, Sindhi derives from a Prakrit that is an early popular dialect of Sanskrit, but it is distinguished if not unique in its retention of a number of characteristic features of this Prakrit which in other existing Indo-Aryan languages are regularly modified" (Lambrick, p. 223).

Sindhi derived from Apabrahmsa Prakrit

"According to the Prakrit grammarian Markandeya, the Apabrahmsa Prakrit spoken in Sindh was called Vrachada" (Lambrick, p. 223). Commenting

on the origin of Sindhi, Sir Grierson states, "According to the Prakrit grammarian Markandeya, the Apabrahmsa Prakrit spoken in Sindh was called Vrachada. It is from this that Sindhi is derived" (Grierson, p. 683).

Sindhi derived from Sanskrit

Most scholars however seem to agree that Sindhi is an Indo-Aryan language, that it has been derived from Sanskrit and not from the Apabrahmsa Prakrit as some others mentioned above believed.

Ernest Trumpp, in his yet unsurpassed grammar of Sindhi language, states, "The old Prakrit grammarians may have had their good reason, to designate the Apabhransha dialect, from which the modern Sindhi is immediately derived, as the lowest of all the Prakrit dialects; but we must assign to it, in a grammatical point of view, the first place among them" and "the Sindhi is a pure Sanskritical language, more free from foreign elements than any other of the North Indian vernaculars" (Trumpp, p. I).

R.F. Burton states, "The origin of the Sindhi dialect appears to be lost in the obscurity of antiquity; but there are ample reasons for believing it is as old as any of the vulgar tongues of modern India. It belongs to the Indian class of languages and is directly derived from the Sanskrit; yet it is a perfectly distinct dialect, and not, as has been asserted, a mere corruption of Hindustani" (Burton, p. 69). Burton further states that "it may be observed, that a good knowledge of Sindhi introduces us to a variety of cognate languages, as the Punjabi, Jataki, Pushtu, Balochi, Brahui and others spoken in countries west of the Indus This may be accounted for in two ways, first that these languages are all derived from some ancient and now unknown tongue, which was supplanted by or blended with Sanscrit, or that, secondly they are all varieties of, the rude and the obsolete form of Sanscrit which gave birth to the dialects of Central Asia" (Burton, p. 70).

Sindhi derived from Dravidian

The belief that Sindhi is derived from Sanskrit appears to have left many unexplained gaps. It appears that Sindhi as derived from Sanskrit was only a belief for the sake of convenience. It is important to note that even Grierson could not ignore the Dravidian element in Sindhi. "Many words have been borrowed from Dravidian languages, generally in a contemptuous sense. Thus the common word *pilla*, 'a cub', is really a Dravidian word meaning 'son'!" (Allana, p. 139). Interestingly, even Trumpp does not appear quite sure of the Sanskrit origin of Sindhi when he states, ".... we shall on the other hand be able to trace out a certain residuum of

vocables, which we must allot to an old aboriginal language of which neither name nor extent is known to us" (Trumpp, p. III). Further, "the Sindhi has remained steady in the first stage of decomposition after the old Prakrit, whereas all the other cognate dialects have sunk some degrees deeper; we shall see in the course of our introductory remarks that the rules which the Prakrit grammarian Kramadishwara has laid down in reference to the Apabhransha, are still recognizable in the present Sindhi, which by no means can be stated of the other dialects. The Sindhi has thus become an independent language, which, though sharing a common origin with its sister tongues, is very differing from them" (Trumpp, pp. I-II).

Baloch is of the opinion that "Sindhi is an ancient Indo-Aryan language, probably having its origin in a pre-Sanskrit Indo-Aryan Indus valley language" (Allana, p. 259). Baloch also states that "the distinct nature of Sindhi, Lahnda and the other Dardic languages (of Kashmir, Kohistan in Gilgit) rather suggest that they owe their origin to the common stock of Aryan tongues spoken at the time of early Aryan settlement all along the Indus valley. It has already been accepted that Paishachi, the mother of Dardic languages, was a very ancient language, a sister and not a daughter of the form of speech which ultimately developed as literary Sanskrit" (Allana, p. 259).

Sirajul Haque Memon, eminent scholar of Sindh, radically states that "Sindhi is not derived from Sanskrit, but on the contrary Sanskrit is a genuine daughter of Sindhi" (Allana, pp. 259-260).

Cambridge History of India states, "Conjectures as to the language of these people (people of the Indus Valley) are almost hopeless; one may confidently assert that it was not Sanskrit, and it is doubtful if it was a Dravidian language" (Allan, p. 4).

The Problem of Sindhi-Sanskrit Relationship

The few questions that raise their heads, and do not help find easy solutions to, in this regard are:

- i) If Sanskrit was never the language of common speech, then how could any other language (in this case Sindhi) be derived from it?
- ii) Dictionaries give the meaning of Sanskrit as 'perfected' (Webster's). If Sanskrit itself means 'purified' or 'artificial', how can it be the origin of an artificial, commonly used language of speech?

- ii) Sanskrit came into being or rather got its name only in the 700 B.C., how is it possible that Sindhi spoken aeons before that is derived from Sanskrit? According to *The World Book Encyclopaedia*, Vedic Sanskrit lasted from about 1500 to 300 B.C. Were the inhabitants of the Indus Valley, who existed even in about 3000 B.C. and who had a fairly advanced lifestyle, linguistically undeveloped? If archaeological studies now trace the Indus Valley Civilization to 3000 to 2500 B.C., is it not time for linguistic theories to re-examine themselves?
- iv) Can we really ignore what Burton refers to as 'some ancient and now unknown tongue' from which Sindhi has been derived or what Trumpp refers to as 'an old aboriginal language' or the 'provincial non-Arian residuum of words' when discussing the origins of Sindhi?

According to V. Varadachari, Lecturer in Sanskrit, Loyola College, Madras (now Chennai), 1952, "Samskrta (Sanskrit) is the name given to the language which has been in use in India for religious and secular purposes since the very earliest times. This name was acquired by this language after 700 B.C. when Panini, the grammarian framed the rules of grammar for this language. The very name Samskrta, as applied to this language, shows that the language became polished or refined" (Varadachari, p. 7). Further, "it was not until the 7th century B.C. that Panini wrote his *Astadhyayi* laying down definite rules for this language. He was followed in the 5th century B.C. by Katyayana also known as Varaucci and in the 2nd century B.C. by Patanjali. Both these writers wrote works supplementing the rules of Panini. The strict rules, which these grammarians framed for this language, made it perfect. This period became the starting point of the classical period when this language acquired the name Samskrta". Sanskrit thus meant a purified, polished language within a strict grammatical framework. It was not the language of speech of the masses. "... It (Sanskrit) was never a living language in the sense of a language of the entire population in India or in a region of India" (Varadachari, p. 4).

Very clearly Sindhi has roots going deeper in than in Sanskrit. A reference to the language or rather 'languages' of the Vedas is important at this juncture. The language of the Vedas again gives rise to questions like: if Sanskrit is the grammatical framework given only in the 7th century B.C., what was the language of the Vedas, for grammar is only derived from a language that already exists?

In the words of V. Varadachari, "Panini framed his rules for the Vedic language. Patanjali tells that the purpose of grammar is not to create

words but to make clear what correct uses are. This statement presupposes the existence of a spoken language for which a grammatical treatise was written by the grammarians" (Varadachari, p. 3-4). It is equally important to take cognisance of the fact that the language of the Vedas is not uniform throughout and the Vedas were not written at one point of time. "Not only were the Vedas composed at different periods but the portions in each were also composed at different periods That the Rgveda was composed long before the other Vedas is proved by the large number of the hymns of the former which are found incorporated in the latter" (Varadachari, p. 11). Further, "... the entire text of the Rgveda was written by different authors at different periods. The same conclusion holds good in the case of the texts of the other Vedas. The earlier portions of the Rgveda were composed about 3000 B.C." (Varadachari, p. 13).

What then is the language of the original Rgveda, not the later polished Sanskrit? Could the language of the original Rgveda give a possible clue to the origins of the Sindhi language?

The Dravidian Influence on Sindhi

Many scholars of the Sindhi language, of the Indus Valley, of Indo-Aryan languages among others believe that the Dravidian languages did flourish in the Mooan jo daro and only obviously have made deep-rooted impressions on the language therein. According to E.J. Rapson, "... there can be little doubt that Dravidian languages were actually flourishing in the Western regions of Northern India" (*Cambridge History of India*, Vol. I; p. 37).

Caldwell, giving a list of words borrowed from Dravidian by Sanskrit, states that "... instead of the Dravidian languages having borrowed them from Sanskrit, or both having derived them from a common source, Sanskrit has not disdained to borrow them from its Dravidian neighbours" (Caldwell, p. 42). Caldwell commenting on the borrowings in Sanskrit from Dravidian states "it was supposed by Sanskrit Pandits (by whom everything with which they were acquainted was referred to a Brahmanical origin), and too hastily taken for granted by the earlier European scholars, that the Dravidian languages, though differing in many particulars from the North Indian idioms, were equally with them derived from Sanskrit" (Caldwell, p. 41). Further, "... wherever any word was found to be the common property of the Sanskrit and any of the Dravidian tongues, it was at once assumed to be a Sanskrit derivative Sanskrit lexicographers and grammarians were not always as discriminate as their Dravidian brethren; and if any writer had

happened to make use of a local or provincial word, that is, a word belonging to the vernacular of the district in which he resided, every such word, provided only it were found written in Sanskrit characters, was forthwith set down in the vocabularies as Sanskrit" (Caldwell, p. 566). "Possibly further research may disclose the existence in the northern vernaculars of distinctively Dravidian forms and roots" (Caldwell, p. 57).

According to R.C. Hiremath, "it is an admitted fact that Dravidian languages have influenced the modern Indo-Aryan languages to a considerable extent. Though it is difficult to find the origin of the Dravidian ..., its influence may be found in some of the modern Indian languages like Hindi, Bengali, and Sindhi" (Hiremath, p. 186).

Sirajul Haque Merion states, "the reason for different hypotheses about the origin of Sindhi language is that no scholar has compared it with Dravidian languages. Sindhi has no doubt remained in contact with Aryan languages, but the influence of these languages is just social and cultural like that of the Semitic languages like Arabic. Due to religious contacts, this influence has increased more" (Allana, p. 279).

G.A. Allana opines, "after having compared the view point of Caldwell with modern methodology of research and after comparative study of phonetic system, morphological and syntactical system of Sindhi and those of the major Dravidian languages - Tamil, Telegu and Kanar¹ - it can be said that Sindhi and Dravidian are cognate languages" (Allana, p. 277).

Archaeological Evidence

The oldest record of the language and script of Sindhi is represented in Moanjo daro seals. The script of that period is very well preserved in the form of various seals which were excavated near D'okri in the Larkana district of Sindh presently in Pakistan. The seals show some sort of pictographic script which goes back to nearly five thousand years. Archaeology supports the view that the Dravidians inhabited the Indus Valley.

In the report that Rakhal Das Banerjee submitted to Sir John Marshall, he quite clearly states this. According to him a comparison of "the discovery of double spouted oblation vessels in the same area at Mohenjo-Daro" on the one hand to "the discovery of a double spouted

1. Kanar here refers to Kannada, a language spoken in Karnataka in South India.

oblation vessel among the pottery fragments from the pre-historic cemetery at Perambair and now preserved in the Madras Central Museum tends to prove beyond doubt that this cult of simultaneous oblations was inseparably connected with the ancient and pre-Vedic Dravidian worship and an undeniable connection is thus established between the pre-Aryan cult and ritual of western and southern India" [He further relates this to "certain ancient Cretan and Egyptian cults of Crete and Egypt"] (Banerji, p. 159).

According to A.D. Pusalker, Assistant Director and Head of the Department of Sanskrit, Bharatiya Vidya Bhavan, "Sir John Marshall has compared the Vedic civilization with that of the Indus Valley and has found that they are quite distinct; and as the entry of the Aryans into India, is subsequent to 1500 B.C., more than a thousand years after the last vestige of the Indus Valley Civilization disappeared, he cannot think of Aryans in connection with the Indus Valley civilization" (Majumdar, p. 197).

T. Burrow states, "The Aryan invasion of India is recorded in no written document, and it cannot yet be traced archaeologically, but it is nevertheless firmly established as historical fact on the basis of comparative philology; the Indo-European languages, of which Sanskrit in its Vedic form is one of the oldest members, originated in Europe, and the only possible way by which a language belonging to this family could be carried all the way to India was a migration of the people speaking it" (*The Penguin Encyclopaedia of Ancient Civilizations*, p. 182).

Varadachari is of the view, "since the event of Aryan immigration could not be supported by any evidence, the question of the date of this immigration does not arise" (Varadachari, p. 21). For Sirajul Haque, "the Aryan hypothesis is a fiction, and it was initiated by the German scholars in their support. There is no influence of Mesopotamian and Babylonian civilization on the Indus Valley civilization, but on the contrary the civilization of Mesopotamia and Babylonia has been influenced by Mohan-jo-Daro civilization, and that the Indus Valley civilization reached there through commercial people and traders" (Allana, p. 260). It is perhaps possible, as V. Varadachari states that "in absence of an authentic evidence to support any such migration, it would be wise to hold, on the strength of evidences available, that the so-called Aryans lived in India itself" (Varadachari, p. 20). Alternatively, as stated by A.D. Pusalker that "sufficient literary materials are available to indicate with some degree of certainty, that the Vedic Aryans themselves regarded Sapta-Sindhu as their original home" (Majumdar, p. 220). Sirajul Haque states, "the excavations of Mohen-jo-Daro have opened a new chapter for the study of the origin of

Sindhi language. It has been agreed upon by all the scholars, archaeologists, historians and anthropologists that Indus Valley was occupied by a non-Aryan (Dravidian) people before the Aryan settlement in the Indus Valley. They had a very rich culture and a language of their own" (Allana, p. 308).

John R. Marr opines, "of recent years, Dravidian has been the strongest contender for the language of the yet as undeciphered Mohenjo-daro seal characters" (Marr, p. 31). He further states, "The most important and recent statement of this position is that of Asko Parpola and others, in three special publications, of the Scandinavian Institute of Asian Studies, we are still none the wiser about the sound of words or syllables 'depicted' and the best the authors can do is to read them as reconstructed Proto Dravidian. It should be added that similar conclusions have been reached by Russian scholars, led by Yu Knorozov, also using computers" (Marr, p. 32). But according to Sirajul Haque Memon, there is little or no place for doubt. "Sindhi language is one of the Dravidian languages and has sprung from the language of Mohen-jo-Daro" (Allana, p. 279).

The next few pages proceed to give further evidence to the statement.

III

OD', BRAHUI, MUHA:NA: IN SINDH

The oD', Muha:na: and Brahui need special mention here because these are tribes in and around Sindh that distinctly show the Dravidian element in the use of language.

The Sindhi oD's

oD'iki is spoken by oD' tribe of Sindh. It is a variety of Sindhi which is very close to the Thareli dialect of Sindhi. Sindhi oD's migrated from Sindh to India after the Partition of India in 1947. The younger generation understands standard Sindhi but very few of them can speak. Some of the oD's born in Sindh can read and write Sindhi in the Persio-Arabic script. They have a very rich oral literature.

A study of the data of numerals collected from the oD's (settled in and around Delhi) shows that they use two different sets of numerals: one

set is of the oD'ki: numerals and the other is that of the local language (this depends on the place in which they are). However, their use of numerals shows use of the Sindhi language. For instance, they make use of prefixes like matha:n which means 'over' in Sindhi, muna: (masculine) and muni: (feminine) means 'three quarters', adh means 'half', sadha: also means 'half', D'odh which is a variant of Sindhi D'edh meaning 'one and a half', etc.

The oD' use of kinship terms is same as that of standard Sindhi. paRa D'a:D'a - 'father's father's father', paRaD'a:D'i - 'father's father's mother', adi - 'sister', ada - 'brother' (or the endearing term bha:u) are a few examples.

An eminent Sindhi scholar, Bherumal Meherchand Advani, believes that Sindhi oD's are of Dravidian origin. In his book he states, "the oD's in Sindh at present, are from the family of Dravidians" (Advani, p. 20). According to Enthoven, "the term oD' or vadda is commonly said to be derived from the Kanarese. oD' 'to join' from the occupation of joining stones in building" (Enthoven, p. 138). Significantly, aD'aNu or aD' in Sindhi is 'to build, join'. The data collected (1989) from the oD's who migrated from Sindh to Delhi shows that they have retained some Dravidian words in their language. E.g.

<i>oD'iki</i>	<i>Tamil</i>
inge va: or inge a: 'come here'	inge va: 'come here'
unge 'there'	ange 'there'

The numeral 'five' is anjgal, similar to the Tamil anj meaning the same. Besides this, the oD's use g'al as a suffix. Numbers from one to ten are suffixed with g'al. gu:l is used as a plural suffix in Dravidian languages (Shanmugam, p. 48). Interestingly, the oD' also share certain similarities in the way of dressing with the Dravidians. The men among the oD's wear a round ring in the ear which they call the 'muruki'. This word is close to the Dravidian word 'muruku' meaning 'circle' or 'round'. For a detailed note on origin of oD's, see appendix 1.

muha:Na: or ma:ngar tribe

Another tribe that draws attention in this regard is the muha:Na: (fishermen) known as the ma:ngar tribe in Sindh. According to Bherumal Meherchand Advani, like the oD's the ma:ngar too belong to the family of Dravidians, "In ancient times, Dravids did exist in Sindh. Even now in

Sindh, there are the oD's and ma:ngars. Whether they are descendants of the ancient Dravidians in Sindh or have come from the South is not sure. For ages in the past, businessmen from Sindh, Kutch and Gujarat have been going to Malabar for trade In present times, there are some muha:Na:s in the Laar district of Sindh who belong to the ma:ngar caste. They are in Kanjar, Thatta district in Sindh" (Advani, p. 123).

According to Sirajul Haque Memon, the muha:Na: caste of Sindh is an aboriginal tribe of the Dravidian race (Allana, p. 280). During my fieldwork, I came across both the tribes (oD' and ma:ngar) in Kutch also. Study of their languages and culture needs urgent attention, for these tribes have retained Old Sindhi vocabulary to a great extent and the vocabulary and intonation show Dravidian influence.

Brahui

The Brahui language is spoken by the Brahui tribe in Baluchistan, where Sindhi is spoken by a large number of people. In the words of Allana, "Sindhi has extended its isoglosses beyond the geographical boundaries of the Province of Sindh. In Northern Sindh, it flows over the North-West into Baluchistan province" (Allana, p. 306). There is no disagreement among linguists about Brahui being a Dravidian language.

Denys D.E.S. Bray states, "an analysis of Brahui discloses no kinship to the Aryan languages which have contributed so richly to its vocabulary but reveals a clear and unmistakable resemblance to the Dravidian languages of southern India, only to be explained on the assumption that it is descended from the same stock" (Bray, p. 8). E.J. Rapson refers to Brahui as ".... the large island of Dravidian speech in the mountainous regions of distant Baluchistan" (*Cambridge History of India*, p. 37). John Marshal states that ".... the Dravidian peoples once dwelt in the highlands of Western India" and further that ".... the survival in Baluchistan of a Dravidian language, Brahui" seems to support this view (*Cambridge History of India*, p. 556). Sirajul Haque Memon states, ".... the Brahui, oD', Kola, Bhila, Muha:Na:s, Jata and other indigenous tribes who lived in Sindh in great numbers are aboriginal tribes of Indus Valley" (Allana, p. 280).

The oD'iki, the ma:ngar dialect and the Brahui language with elements of Dravidian in them support the hypothesis that a strong Dravidian influence was present in the Indus Valley before the Aryans.

Guide to Pronunciation

Vowels			Consonants					
a	as in	person	k	as in	monkey	y	as in	yes
a:		father	kh		lakh	b		blue
i		him	g		mig	f		father
i:		sea	gh		ghetto	m		mother
u		put	c		chair	r		rose
u:		soon	j		jar	l		long
e		get	n		nose	s		sun
E		hand	th		think	T		tomorrow
o		so	p		pen	D		daughter
O		how	ph		paper	v		van
			sh		should	h		here

[Note: The colon stands for length as seen in the chart. All the above ten vowels of Sindhi have their nasalized counterparts. The symbol for nasalization is tilde (~). This follows a vowel. The examples given here are keeping in mind the Indian pronunciation of the sounds.]

Besides these, there are some sounds that do not have English counterparts. These are: t as in ‘Tamil’, d as in ‘Dravidian’, Th as in Sindhi name j’eTha, Dh as in Sindhi Dhag’o, ch as in Sindhi ‘cha’ (the number six), jh as in Sindhi ‘jhuro’ (a place in Kutch), bh as in Bharat, dh as in Sindhi.

[Note: Aspirated sounds are shown by adding ‘h’: ph, bh, th, dh, Th, Dh, ch, jh, kh, gh. Retroflex sounds are shown by capital letters: T, Th, D, D’, Dh, N, R. Implosive sounds are shown by an apostrophe: b’, D’, j’, g’.]

IV
PHONOLOGY

The vocabulary discussed here in the following sections deals with those of Old Sindhi and Old Tamil. Many of the words compared here are no longer in use, in both Tamil and Sindhi today. Many of the Sindhi words can be traced to the times of Shah Latif’s writings. Some are even more ancient and these words may sound unfamiliar to a speaker of Sindhi today. The same may be said of Tamil too. Commenting on the language of the Mooan-jo-daro as being Dravidian, S.K. Chatterji states, "moreover, we have to take note of the fact that Old Tamil in its phonetics represents a

very much decayed form of the primitive Dravidian speech which - or something like which - can alone be expected to have been in use in the third millennium B.C., the approximate date for the Mohenjo-daro culture" (Majumdar, p. 158). It therefore becomes all the more important to take serious note of the similarities that have sustained a strong presence, in spite of Time, in the vocabulary of Old Sindhi and Old Tamil. A comparative study of the vocabulary of Sindhi and Tamil shows certain recurrent phonetic features.

1. Vowel Endings

A remarkable similarity seen in the vocabulary of Sindhi as well as Dravidian is that every word spoken individually ends in a vowel. It is also important to note that the speakers in these languages do so without any conscious effort. When words are spoken in unison with other words, there may or may not be a vowel ending depending on the pauses. The last word before the pause shows the vowel ending which may be a short a, u, i. This can be seen in the section on vocabulary, where words of Sindhi and the Dravidian languages have been compared.

2. Consonant Clusters

Consonant clusters are not possible in the initial or final position in Sindhi or in the Dravidian languages. For example, the name *praka:sh* is pronounced as *pirka:sh* or *parka:sh* in Sindhi. In Tamil, the same word is *parga:sam*. Here, in Sindhi and in Tamil, a vowel is inserted between the clustered consonants *pr*, and the *r* is not clustered with the following voiceless *k* in Sindhi or voiced *g* in Tamil.

3. Reduplication

Reduplication is seen commonly in both, Sindhi and Tamil. E.g. *varavara* in Tamil means gradually (*DED* 4311). Sindhi also has *varivari*, meaning gradually or repeatedly.

4. Change of voiceless to voiced

The sounds that are voiceless in Sindhi often become voiced in Tamil. The voiceless *p* and *T* of the Tamil word *poTTi* ('deaf and dumb woman') becomes voiced *b* and *D* in Sindhi word *b'oDi* ('deaf and dumb woman').

5. Unaspirated to aspirated sounds

Sindhi shows greater use of aspirated sounds than the Dravidian languages. Very often, Sindhi aspirates the unaspirated sounds of the Dravidian

languages. The word *vicu* in Tamil means to cast as net, drop, put. In Sindhi, *vijhu* means to cast as net, put, etc. Here, the voiceless, unaspirated *c* of Tamil has changed to voiced, aspirated *jh* in Sindhi. The La:Ri: dialect of Sindhi like the Dravidian languages retains the unaspirated sounds. The Sindhi word *jhero* meaning quarrel is pronounced as *jero* in La:Ri:. The Tamil word *cero* means quarrel.

6. Retroflex

Retroflex sounds are common to both Sindhi and Dravidian languages. Very often due to retroflexion, the consonant sounds similar to a different consonant. For example, there is an unnoticeable difference in the retroflex *R* and the ordinary *D* or retroflex *T* which may sound similar to *R*, as in the case of Sindhi *ma:Ri* which means the same as Tamil *ma:Ti* ('upstairs house or terrace'). Sindhi tends to retroflex sounds that are not retroflexed in the Dravidian languages, especially, *l*, *r*, *d*, *t*, *n*. Tamil *cari* ('an incline upward') becomes *ca:Rhi* (meaning the same) in Sindhi. Here, the sound *r* has been changed to retroflex *R* which is aspirated to form *Rh* in Sindhi.

7. ai > a

The word-final *ai* in Tamil is often dropped and replaced with *o*, *u* or *a* in Sindhi. Tamil *tonai* > Sindhi *dono*. Tamil *ai* > Sindhi *o*.

8. Addition of h

In Sindhi, sometimes the glottal *h* is added: i) in the word-initial position beginning with a vowel in the Dravidian languages. Tamil *er* ('plough') > Sindhi *haru*. In the La:Ri dialect of Sindhi, it is *ar*; ii) in the word-final ending in a vowel in the Dravidian languages. Tamil *ko* ('mountain') > Sindhi *koh*. In La:Ri, this remains *ko*.

9. o > am

The *am*-ending of Tamil words is often changed to *o* in Sindhi. Tamil *curam* 'narrow' > Sindhi *soRho*, Tamil *pa:cam* 'eye of a needle' > Sindhi *pa:kho*.

10. v > p > ph

A change that is seen recurring in the comparison of the Dravidian vocabulary to Sindhi vocabulary is that the *v* of Dravidian words changes to

p in Sindhi. Sometimes, this p further gets aspirated to ph. Tamil vaTu ‘mouth of a wound’ > Sindhi phaTu, Tamil ta:vu ‘jump’ > Sindhi Tapu.

11. ar plural suffix

ar is used as a plural suffix in Dravidian languages (S.V. Shanmugam, p. 45). ar is also used as a plural suffix in Sindhi.

singular		plural	
ma:u	‘mother’	ma:ur	‘mothers’
pi:u	‘father’	pi:ur	‘fathers’
bha:u	‘brother’	bha:ur	‘brothers’
dhi:u	‘daughter’	dhi:aru	‘daughters’

12. Implosives in Sindhi

Sindhi has four implosives: b', D', g', j'. A word like poTTi in Tamil becomes b'oD'i in Sindhi. Here, not only do the voiceless sounds p and T become voiced, but they also become implosives, b' and D'.

13. Metathesis

A comparative study of the vocabulary of Sindhi and the Dravidian languages also offers many instances of metathesis. Sindhi takaR ‘haste’, Tamil katar ‘haste’. Besides the r changing to retroflex R in Sindhi, there is metathesis.



V
VOCABULARY

I. Kinship Terms

Kinship terms in Sindhi and Dravidian languages show remarkable similarities.

1. Mother

In the standard variety of Sindhi, several terms are used for ‘mother’: amaR (in the Harijan dialect of Sindhi, this is amaL), a:i:, ma:ta:, ma:dar, va:lida, ami:, ma:u, ama: ~ , and modern Sindhi speakers use mami and ma:m (mom).

- 1.1 ma:ta:, ma:u and ama: ~ : Of these ma:ta: and ma:u can be traced to Sanskrit and most of the scholars claim ama: ~ to have come from Sanskrit amba:. Without entering into any controversy, I proceed further.
- 1.2 ma:dar and va:lida: These two terms are mostly used by Muslim speakers of Sindhi, though both terms are used in Sindhi literature and dictionaries. ma:dar is Persian and va:li:da is Arabic.
- 1.3 ma:mi and ma:m: These terms can easily be related to English terms 'mummy' and 'mom'.
- 1.4 ayal - a:yal as an appellative of address and appellative of reference is recorded in the classical literature of Sindhi. Shah-Jo-Rasalo uses a:yal very frequently. No Sindhi scholar disputes its meaning, but all dictionaries trace its etymology to Sanskrit a:rya: (Baloch, p. 91). The fact however remains that a:rya: was neither used in Vedic Sanskrit nor classical Sanskrit or after that, in the meaning of 'mother' (Karve, p. 87).
- 1.5 Among Sindhi Harijans, Menghwal, Koli and Vadha tribes, a:yaL (retroflex lateral) is used. These speakers also show the use of a:ya:L for 'mother'. This is recorded in several folk songs of not only the above-mentioned communities but also in the songs of the Rebari, Sodki and Jatki tribes. a:yaL or a:ya:L is close to Tamil ayaL (*DEDR* 308). This term is commonly used by caste Hindus and Harijan tribes. Interestingly, a:yal is also part of a common Sindhi personal name a:yalda:s and common Sindhi surname a:yalda:sa:Ni. The literal meaning of a:yalda:s is 'servant of mother' and Ni is a common suffix of Sindhi surnames.
- 1.6 amaR or ama:L: A popular nursery rhyme in Sindhi - 'mu: ~ hji amaR mu: ~ hji amaR - amaR refers to 'mother'. I get this word in many folk songs of the Menghwal and Koli tribes sung by their womenfolk. Baloch in his dictionary links amaR to Sanskrit amba (Bal, p. 254). In my humble opinion, amaR and ama:L, as attested by the Harijan speakers of Sindhi is closer to Tamil ammaL as given by *DEDR* (183).
- 1.7 a:i:, a:i for 'mother' is recorded in almost all dictionaries of Sindhi. Working on Sodki dialect of Sindhi, I found that it is being used as an appellative of address and reference even today. a:i is still retained in personal name a:ida:s among high caste Hindus of my generation and is also retained in the surname a:ida:sa:ni. *DEDR* also records ay as Tamil (*DEDR* 364). The word for stepmother in Sindhi is paha:i. This is paha and a:i. paha in Sindhi is 'step' a:i is 'mother'.

1.8 ji:jal is yet another term for 'mother' in Sindhi. It is difficult to trace the etymology of the term ji:jal though it occurs in Shah-Jo-Rasalo and some dictionaries. a:yal, a:i: and amaR which are of Dravidian origin have survived in Sindhi, hence it is possible that Dravidian yayal (*DED* 364) has undergone phonetic change to ji:jal and survived in Sindhi.

From the above evidences, we can see that if we take the terms for 'mother' borrowed from Sanskrit, Arabic, Persian and English, then the remaining terms are not only similar but also almost identical to the Dravidian terms. The fact that these are still being used by the rural Sindhi masses and the Sindhi speakers who are considered backward and labelled 'Harijans' (see Appendix) requires serious consideration.

2. Midwife or Wet-Nurse

da:i is the term used for 'wet-nurse' in Sindhi. In Tamil, taycci is 'wet-nurse'. The voiceless t of Dravidian becoming the voiced d in Sindhi is a regular feature.

3. Mother's Brother

The term for 'mother's brother' in Sindhi is ma:ma: and the term for 'mothers brother's wife' is ma:mi:. According to Prof. Irawati Karve, "the terms mamaka and mama are not found in either Vedic literature or in the *Mahabharatha*. They are of very frequent occurrence in the story literature of *Panchatantra* where various beasts address each other as ma:maka. It means 'mother's brother', though it is used in many stories merely as a mode of address for any stranger. It does not seem to be an original Sanskrit term" (Karve, p. 92). *DED* (3945) suggests ma:ma: as a Tamil word in the meaning of 'mother's brother' or 'maternal uncle'. Interestingly, one of the meanings of the Tamil ma:ma: as recorded by *DEDR* (4813) is 'father-in-law'. In Jadeja (see Appendix 5), speakers of Sindhi ma:ma: is the term used by married women to refer to her father-in-law even today.

4. Elder Sister

Sindhi uses the term addi: for 'elder sister' which can be related to Tamil atti meaning 'elder sister' (*DEDR* 142). Phonetic change: voiceless t of Tamil becomes voiced d in Sindhi.

5. Elder Brother

adda: in Sindhi refers to 'elder brother' or to an unknown male. Tamil atta: is 'elder brother' (*DEDR* 121). Phonetic change: voiceless t of Tamil becomes voiced d in Sindhi.

6. Sister

In Sindhi, *bheN* means sister. It is also used as an appellative for addressing any unknown female. In the Lari dialect of Sindhi, *bheN* is pronounced as *peN*. The Tamil term *peN* means 'woman, daughter, girl, wife, bride'. The striking similarity in the terms of Sindhi and Tamil cannot go unnoticed. Phonetic change: voiceless *p* of Tamil becomes voiced, aspirated *bh* in Sindhi.

7. Father

The Sindhi term for 'father' is *abba:*. In Tamil, *appa:* 'father' (*DED* 133). Phonetic change: voiceless *p* of Tamil becomes voiced *b* in Sindhi.

8. Grandfather

In Sindhi, *D'a:D'a:* 'grandfather'. In Tamil *tātta:* 'grandfather' (*DED* 2580). Phonetic change: voiceless *t* of Tamil becomes voiced *d* in Sindhi which in turn becomes retroflex, implosive *D*.

9. Husband or Warrior Husband

In Sindhi, *ka:ndh* means husband, warrior husband. This term occurs several times in Shah Abdul Latif's writings. E.g. *Sur Samu:di*, *Shah-Jo-Rasalo*; Government Central Book Depot; Karachi; 1923; p. 101: "*ala:ka:ndh ache, a:sa:iti a:hiya:~*". In Tamil, *kaNtaN* means warrior husband (*DED* 986). Phonetic changes: the final 'an' of Tamil is dropped in Sindhi, and the voiceless *t* of Tamil has been replaced by voiced *d*, which has become aspirated *dh* in Sindhi. This is a regular change between the two languages.

10. Husband's Sister

In Sindhi, *niRa:N* is the term used to refer to husband's sister. The wife often uses the term *nanDiRi* meaning small to address the husband's younger sister. In Tamil, the word *na:ttaNar* or *na:ttun* means husband's sister (*DED* 3017). *nanni* in Tamil means 'that which is small' (*DED* 3008). The Kanad term *na:dini* means husband's sister.

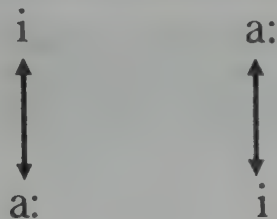
11. Bridegroom

In Sindhi, the term *ghoTu* means bridegroom. In Old Sindhi, *ghoTu* is also referred to the 'state of being full grown'. In Tamil, 'goTu' means 'the

state of being full grown' (*DED* 1826). The phonetic change here is regular. Unaspirated g of Tamil has become aspirated gh in Sindhi.

12. Wife's Sister

In Sindhi, the word sa:li means wife's sister'. In Tamil, cila:tan means 'wife's sister'. Phonetic changes: s has replaced c, metathesis of the vowel sounds:



and Tamil an has been dropped in Sindhi.

13. paRa

In Sindhi, paRa is the prefix attached to 'grandfather' and also indicates 'old' or 'great' grandfather. In Tamil, the word paRa means old (*DED* 3296).

14. chokaru

In Sindhi, chokaru refers to 'boy'. There is no evidence of it being close to any Sanskrit word. However, Tamil word cerukkan is closer. The phonetic changes that have taken place here are regular features of change between Sindhi and Tamil. Final an of Tamil has been dropped in Sindhi, and there is metathesis here:



15. pappan

In Sindhi, pappan is the term of endearment for little boys. In fact, it continued to be a pet name among youngsters till recent times. In places like Ulhasnagar, Bairagarh and Pimpri (which have been refugee camps of Sindhis after Partition), it is possible to hear pappan as a pet name even today. pappu is soon replacing pappan. In Tamil, appu is a term used for father or as endearment for children or inferiors (*DED* 133).

16. ai: ala:

This is a common idiom retained in Sindhi to this day. ala: here is 'a call in distress'. ai: is a term used by women to address one another (*BAL* 27).

Thus, 'ai: ala: is the call given by one woman to another in times of distress literally. With the passage of time, however, it has become a common exclamation of surprise, pain, etc. by men and women. It is important to point out here that this ala: is different from the God allah. Shah Abdul Latif's poetry shows use of both terms ala: and allah in their respective meanings: ala: and allah in Shah Abdul Latif's poetry: 'la:hiya: ~ je na cita: ~ ala: un ma visra: ~' (p. 99), 'alla:h ume ~ du: ~ puj'a:yam eD'yu: ~' (p. 639) (Shah-Jo-Rasalo; Sur Samu:di; Government Central Book Depot; Karachi; 1923). In Tamil, the word ala: means to suffer, be in distress, pain, misery (*DED* 200). Semantically, the two - ala: of Tamil and ala: of Sindhi - definitely bear a relationship.

II. Body Parts

Under this section, terms for body parts and terms related to the body are discussed. These terms include defects in body, mother's milk, words for excretion, etc.

1. va:i:, va:tu

In Sanskrit, the word mukh is used for mouth and face (MW p. 819). Hindi also has one word mukh for both mouth and face, but Sindhi has two different words for mouth and face. For face, Sindhi uses munhu which is etymologically related to Sanskrit mukh. For mouth, Sindhi uses va:tu which can be related to Tamil vāy meaning mouth and Telugu va:yi: meaning mouth (*DED* 4385).

In Sindhi, va:i is used to mean language. Shah Abdul Karim uses it to mean language: "va:i va: ~ em sha:l budhaN kha: ~ b'oRi: thya: ~" ('may I lose my speech and become deaf'). In the thari or soDhki dialect of Sindhi, the term b'a:ko is used to signify mouth. If we extend our discussion to Hindi, a neighbouring language, then we have ba:t meaning talk in Hindi. Talk is always related to mouth and this semantic change is quite possible in these two languages. The presence of t in Hindi ba:t and Sindhi va:t indicates some missing link lost in the womb of time. The presence of t in both Hindi and Sindhi distances the terms from the Sanskrit term va:Ni:. Related to Sanskrit va:Ni: is the Sindhi term b'a:Ni: which means 'religious talk or the speech of saints, or sayings of saints, like gurub'a:Ni:'. Sanskrit being the language of the sacred texts, va:Ni: is also considered sacred and the Sindhi word b'a:Ni: is exclusively used for the language of the sacred texts and the sayings of saints, etc. On this basis, we can conclude that the word b'a:Ni: etymologically relates to Sanskrit va:Ni: and va:i: relates to speech of the ordinary people. To support my hypothesis, I will like to give

one more example of this nature. The Sanskrit word jal which becomes jalu in Sindhi is always used for sacred water and is used in compounds like gangajalu while non-Indo-Aryan words pa:ni: and ni:ru are used for water in the ordinary sense. ni:ra is also the word for water used in Tamil. From these facts, we can conclude that va:i: and va:tu are etymologically related to Tamil vāy and Telugu va:yi: meaning mouth.

2. galmuki

In Sindhi, galmuki refers to 'talk ended' (extended to mean 'problem is solved'). Here, gal refers to 'talk'. In Tamil, muki means end, terminate (*DED* 4005).

3. munhu

munhu means face or mouth in Sindhi. In Tamil, mukam is face or mouth (*DED* 4003).

4. miNmiN, bhuNbhuN

In Sindhi, means to speak with a low voice. miNumiNu means exactly the same in Tamil (*DED* 3978).

5. va:ta:ru, va:tiru

In Sindhi, va:ta:ru means a talkative or a chatterer. In Tamil, vataru or vatari means talkative or to chat (*DED* 4288).

6. coTi:

In Sindhi, the word for plaited hair and matted lock of hair is coTi: which is clearly related to Tamil caTai (*DED* 1897). In this case, some phonetic change has occurred because semantically coTi: and caTai are absolutely identical. Sindhi also has coTo which means thick or big lock of hair. Sindhi also has jaTa: meaning a lock of hair of a religious person or saint. This though etymologically related to Tamil caTai has possibly come to Sindhi through Sanskrit. In Sindhi, the extension of meaning can be seen in case of males having plaited hair as a symbol of Hinduism. The term coTi is applied here too. But coTi also means top of a hill or mountain. Probably because the lock of hair is on the top of a person's head, hence, what is on the top of a hill or mountain is also coTi:. The ai ending of Tamil changing to o in Sindhi is a regular phonetic change.

7. capa

In Sindhi, capu is a lip and capa means lips. These words are different from the Sanskrit word adhar and Hindi word honTh. Tamil has

cuppu meaning 'to suck and sip' (*DED* 2154), and cumpu 'to suck and fondle with lips' (M B Emeneau; *Dravidian Linguistics, Ethnology and Folktales, Collected Papers*; 1967; p. 19). The word for suck in Sindhi is cu:paN and its root cu:p is very close to Tamil cu:ppu meaning suck or sip. cumpu in Tamil 'to fondle with the lips' is very close to Sindhi cumi: meaning kiss. Tamil cumpu and Sindhi cumi: are very close in form and meaning..

8. mucha

The word for moustache in Sindhi is mucha which is very close to Tamil word for the same micai (*DED* 3996). The regular phonetic changes are: Tamil unaspirated c becomes aspirated ch in Sindhi, and final ai of Tamil becomes a in Sindhi.

9. Toro

The original word for 'stool' in Sindhi is Toro. Toro (Bal. 698), now out of vogue in Sindhi, is close to Tamil tūru meaning 'to go to stool' (*DED* 2796). Sindhi has cu:t for secret or hidden organ. This can be related to Tamil cu:tu (*DED* 2249). This word is preserved in Sindhi word cutu:n also. Another word for 'stool' in Sindhi is ka:kus. It signifies both 'stool' and the 'place of passing stool'. In Malayalam, the term kakku:s refers to the 'place for passing stool'.

10. pisu

The term pisu in Sindhi is used for the milk of cow or buffalo which is milked for the first time after it has given birth to its young one (Bal. 813). This term is close to Tamil word pa:cci meaning 'milk, mother's milk'. (*DED* 3342).

11. duhilu

duhilu in Sindhi means drum, a very common musical instrument. The main part of this musical instrument that is used in producing the music is made from the hide of a dead animal. The word for skin or hide in Tamil is tōl (*DED* 2937). The La:Ri: dialect of Sindhi has dol² for drum that is very close to Tamil tōl. Phonetic change: voiceless t of Tamil has become voiced d in Sindhi. Hindi, the neighbouring language of Sindhi, has Dhol which can also be etymologically related to Tamil tōl.

2. The La:Ri dialect of Sindhi shows this feature of not aspirating the sounds aspirated in standard Sindhi.

12. ka:No

In Sindhi, ka:No meaning 'one-eyed' is the masculine form and the feminine form is ka:Ni. These are definitely related to the Dravidian ka:N (*DED* 973). In this regard, Emeneau (Emeneau, p. 162) writes that ka:Na: 'one-eyed' is very obviously derived from the negative adjective "who does not see" of the Dravidian verb ka:n 'see'.

13. b'oDi

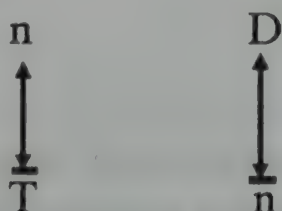
b'oDi in Sindhi is the term used for deaf and dumb woman. poTTi in Tamil means the same (Shanmugam, p. 44). The phonetic changes are regular. Voiceless p and t of Tamil have become voiced b and voiced retroflex D respectively in Sindhi. This is closer than the Sanskrit word badhir for deaf.

14. manDi:

The word for lame in Sindhi is manDi:. Dravidian languages have semantically identical terms. Tamil has monti for kneeling, kneeling on one knee. Telugu has manDi for kneeling on one leg. Kannada has manDi for what is bent (*DED* 3828). The Sindhi word manDi: can be etymologically related to the Dravidian words. The phonetic change is: voiceless t of Tamil becomes voiced, retroflex D in Sindhi.

15. manDaka

In Sindhi, manDaka refers to state of bending a leg. maTaṅku in Tamil is 'to become bent at the arm or leg' (*DED* 3796). Regular phonetic change has taken place here. Voiceless T has changed to voiced D. In addition, there is metathesis.



16. para

Sindhi has two words for wings of a bird - para and pankha. The term pankha can easily be related to Sanskrit paksha and para can be related to Tamil para meaning 'to fly' (*DED* 3311).

17. ta:ru ~

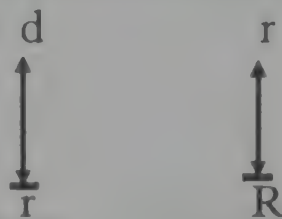
In Sindhi, ta:ru ~ means head. It is close to Tamil talai meaning head, top (*DED* 2529).

18. muro

In Sindhi, muro refers to the ankle. In Tamil, muRāṅka:l refers to knee, part of the leg from knee to ankle (*DED* 4093) and muram is cubit (*DEDR* 4990).

19. nuruRu

In Sindhi, nuruRu means forehead. In Telugu, nuduru means forehead. The Tamil word for forehead is nutal (*DED* 3069). The Sindhi word nuruRu is close to the Telugu term nuduru both meaning forehead. The phonetic change is regular. The d in Sindhi becomes retroflex R and a metathesis has taken place.



20. thaDo

In Sindhi, thaDo is a word for hip or buttock. In Telugu, tunTi is hip. In Tamil, tuTai and toTai is used for thigh (*DED* 2704). Regular phonetic change: unaspirated t of Tamil has changed to th in Sindhi, and voiceless T of Tamil and Telugu have changed to voiced D in Sindhi.

21. pici

In Sindhi, pici refers to slimy impurities of the eyes. Kannada picu means the same (*DED* 3408).

22. kund

In Sindhi, kund refers to hair especially woman's, tresses. In Malayalam, kūntal means woman's hair (*DED* 1572). Regular phonetic change: voiceless t of Malayalam has changed to voiced d in Sindhi.

23. va:r

va:r in Sindhi means hair. In Tamil, va:r means to comb, as hair (*DED* 4388).

24. si:r D'yaN

In Sindhi, si:r D'yaN means to comb. In Tamil, īr is to comb and sīr id is to comb out (*DED* 2158).

25. ci:Rh

In Sindhi, ci:Rh refers to thick hair especially that of a woman. In Tamil, ceRi is thick as foliage, hair (*DED* 1648). Regular phonetic change: unaspirated R of Tamil has become aspirated Rh in Sindhi.

26. ku:RaN

ku:RaN in Sindhi refers to shave, shaving. In Tamil, korai is to 'scratch, as on body' (*DED* 1869). In Telugu, koRugu means 'to shave' (*DED* 1870).

27. Taṅga

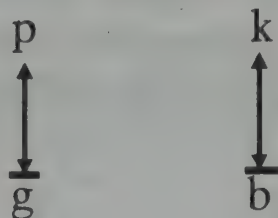
In Sindhi, Taṅga means leg. In Kol., tonḡe is knee (*DED* 2419).

28. nakku

In Sindhi, nakku means nose. In Tamil, the word for nose or nostril is mūkku (*DED* 4112).

29. gobo

gobo in Sindhi means mucus of the nose. In Tamil, pakku means dried mucus of the nose (*DED* 3155). Regular phonetic changes: voiceless k and p of Tamil have become voiced g and b in Sindhi, and a metathesis has taken place.



30. senhi

senhi in Sindhi refers to a round pillow especially used to keep under the head of a newborn child. In Tamil, ceNi refers to head (*DED* 1655). In La:Ri dialect of Sindhi, it is seNi. Recurrent phonetic changes have occurred. Tamil c has become s in Sindhi, and unaspirated N in Tamil becomes aspirated nh in Sindhi.

31. thuka

thuka in Sindhi refers to spit. In Tamil, the word tuku means worthlessness, or a useless person (*DED* 2688). In my view, the semantic change is not much because spitting is a useless thing. Ta. Ma. tuppāl is saliva, spittle. Ta. tuppū is to spit, Ma. tuppuka, Tel tuppuka is to spit. (U.P. Upadhyaya; *Dravidian and Negro-African*; p. 75). In Sindhi, thuka refers to spit. Here, if we consider the presence of -ka in Ma. and Tel. tuppuka, then

we can say that the -ppa- is dropped and the initial t has become aspirated th in Sindhi thuka. (The aspiration is a recurrent feature.)

32. phaTu

In Sindhi, phaTu refers to the mouth of an ulcer or wound. In Tamil, vaTu means 'mouth of an ulcer or wound, a wart or a mole' (*DED* 4275). Here, the phonetic change is a recurrent one: $v \rightarrow p \rightarrow ph$ (aspirated form of p)

The following terms relate to garments or adornments specific to a certain part of the body or to any of the five senses of the body or even to acts performed by certain parts of the body.

33. un ~

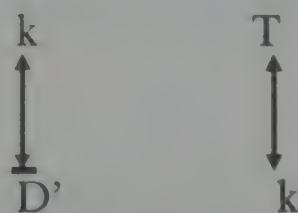
un ~ in Sindhi means thirst. In Tamil, un ~ means to drink or eat (*DED* 516). Semantically, the two are close.

34. kaRo

kaRo in Sindhi means pungent or acrid. In Tamil, ka:r means pungent or acrid (*DED* 1251). In the Hyderabad dialect of Sindhi, it is karo.

35. D'akaD'aka

In Sindhi, D'akaD'aka means trembling. In Tamil, kiTukiTu means trembling (*DED* 1282). Various regular phonetic processes have been at play. Voiceless T of Tamil has changed to D in Sindhi, the D has then taken its retroflex form D and a metathesis has taken place.



36. poti, potiRo

poti, potiRo in Sindhi is a word meaning a piece of cloth, a cloth used by girls or women to cover their heads (Bal 841 - I). In Tamil, the word potti means garment of fibres, cloth (*DED* 3689).

37. cu:Ri

In Sindhi, cu:Ri means a bangle circular in shape, worn around the hand. In Tamil, cura or curru is to revolve, ring, circular, etc. (*DED* 2238). r of Tamil has become retroflex R in Sindhi. Semantically, proximity of the two cannot be denied.

38. ma:lha:

In Sindhi, ma:lha: means a garland or necklace worn round the neck. The word ma:lai is used with the same meaning in Tamil (*DED* 3954). The Sanskrit word for garland is ma:la:.

39. pa:kho

pa:kho in Sindhi is the word for 'eye of needle'. In Tamil, the word for 'eye of needle' is pa:cam (*DED* 3339). In the La:Ri dialect of Sindhi, it is pa:ko. The phonetic changes here are: c has changed to kh that remains unaspirated k in La:Ri and becomes aspirated in standard Sindhi. (Here again, La:Ri shows the regular feature of not aspirating k to kh); the am ending of Dravidian languages changes to o in Sindhi.

40. pi:RaN

pi:RaN in Sindhi refers to the act of squeezing, pressing out with hands, etc. In Tamil, piri means to squeeze, press out with hands, etc. (*DED* 3440).

41. pi:RaN

pi:RaN in Sindhi also means to crush. In Tamil, piL is to crush. (*DED* 3446).

42. pi:saN

pi:saN in Sindhi means to grind, crush. In Tamil, picai means to knead, crush and separate as kernel of grain for ear (*DED* 3404).

43. karai

karai in Sindhi refers to wrist. In Tamil, Malayalam, Telugu, Kannada, kai is hand (U.P. Upadhyaya; *Dravidian and Negro-African*; p. 75).

44. paghar

paghar refers to sweat in Sindhi. In Tamil, veyar, Tulu begaru is sweat (U.P. Upadhyaya; *Dravidian and Negro-African*; p. 76). The initial b and medial g in the Tulu begaru can help to trace initial p and medial gh in Sindhi.

45. ba:ru

ba:ru in Sindhi refers to load carried on the head or load in general. In Kannada, buruDe is head and hore is head-load, horu is to carry on the head (U.P. Upadhyaya; *Dravidian and Negro-African*; p. 74).

46. kandh

kandh in Sindhi means shoulder and g'ici means neck. In Tamil, kaNucu is neck (*DEDR* 1366). In the case of kandh, the retroflex N of Tamil kaNucu becoming ndh is quite possible. In the case of g'ici, N has been dropped and voiceless k of Tamil becoming voiced, implosive g' in Sindhi is a regular phonetic change.

47. galla

galla is cheek in Sindhi. In Tamil, galla is cheek (M.B. Emeneau; 1967; p. 116).

48. ganDa

ganDa means lump, boil, knot in Sindhi. gaNDa means the same in Tamil (M.B. Emeneau; 1967; pp. 117-8).

III. Personal Names

The study of personal names of Sindhi Hindu speakers (hereafter SPN) and personal names of Hindu speakers of Dravidian languages (hereafter DPN) shows remarkable similarities.

One of the peculiarities of Dravidian personal names is their -an ending. This suffix is not found in the personal names of North India. The following comparison makes this clear.

<i>North Indian Personal Names</i>	<i>Dravidian Personal Names</i>
gopa:l	gopa:lan
ra:m	ra:man
shiva	shivan
krishna:	krishnan
ra:j	ra:jan
mohan	mohanan

A comparative study of SPN and DPN, however, shows remarkable similarities. There is a set of SPN that have the -an ending. These names also occur without the -an ending. Some examples are:

I.	<i>SPN without -an ending</i>	<i>SPN with -an ending</i>
	ra:m	ra:man
	shya:m	shya:man
	shiv	shivan

da:so (from da:s meaning slave)	da:san
ra:j, ra:ju	ra:jan
pamo (short form of parma:nand)	paman
hem (short form of hemchandra)	heman

II. In addition to these -an ending SPN, there are other SPN that exist only with the -an ending - SPN only with -an ending - these are names derived from some word with some specific meaning. These words alone without the -an ending are not found as names.

<i>Sindhi word (not found as name)</i>	<i>meaning</i>	<i>SPN with -an (male names)</i>
bhim	one of the five Pandava brothers in the epic of the <i>Mahabharatha</i>	bhi:man
D'ev	god, deity	D'evan
manghu	outlet for air in the roof of a house	manghan
i:da	Muslim festival	i:dan ³
bha:v	feeling	bha:van
sabhu	all	sabhan
khi:mo	minced meat	khi:man
gi:do	pocket	gi:dan
a:s	hope	a:san ⁴
noto	invitation	notan

III. There is yet another category of -an ending names commonly found among the Jat⁵ community of Sindhis.

3. The name i:dan in the above list requires special notice. I:d is a Muslim festival but i:dan as a personal name is found among both, the Hindus and Muslims of Sindh.
4. Asandas Hemrajani, well known Sindhi educationist and scholar from Delhi, suggested (in a private conversation) about the etymology of the name a:san that it could be from Sanskrit word a:san meaning seat. However, the Sindhi word for seat is a:saNu, not a:san. Further, a:saNu as a personal name is not found in Sindhi. Until recent times it was believed that every Sindhi word has to have a Sanskrit relation, etymologically. However once we accept that SPN have -an as a suffix then it is clearly more acceptable to see that a:san comes from a:s and is not a:saNu.
5. The Jat community is one of the prominent Sindhi Muslim communities of the Banni region of Kutch. (For further details, see appendix.)

<i>Word</i>	<i>Meaning</i>	<i>SPN</i>
sukhu	happiness	sukhan
jumo	Friday	juman
jhulo swing	jhulan/jhulaN	
gul flower	gulan/gulaN	
kha:n	a Muslim title	kha:nan/kha:naN

The above names are clear evidence of the fact that even after accepting Islam, the tradition of -an ending personal names continues among the Jats. This supports the fact that this Dravidian element of -an ending names was so strong among Sindhis that even after centuries of accepting Islam some strong traces are left behind.

IV. Period of -an ending names

In the absence of written records or other evidence, it is very difficult to establish the period or date of -an ending names among SPN. Excavations of Bhambore town (90 km. from present-day Karachi) revealed an earthen pot with some SPN. One of the names that appears on the earthenware is bhi:man. Archaeologists have established its period as about 8th century A.D. (Ghulam Ali Allana; 1987; p. 242).

Sindh was conquered by the Arabs in A.D. 712. During that period, the ruler of Sindh was a Brahmin, Raja Dahir. Dahir's father had established Brahminical rule in Sindh after Rai Sahasi. Historians claim that Rai Sahasi was a shudra king. It was customary to call a non-Aryan a shudra. Whether this shudra is Dravidian is yet to be definitely proved. In this regard, it is important to note that SPN bhi:man was found in the 8th century A.D. At least we are certain that -an ending names are not recent in Sindh. These names date to twelve centuries back and may be even more. Further excavations will help throw more light on this important evidence of Dravidian-Sindhi relations.

V. Some missing SPN

Due to some unknown reasons, we do not get Dravidian personal names like gopa:lan, krishnan, mohanan and ba:la:krishnan in the present SPN. In the absence of written records, it is very difficult to say anything.

VI. Present Trend of SPN

In the present times, the trend of naming Sindhi children shows that -an ending names are no more preferred. Even among Sindhi speakers settled in Tamil Nadu, Andhra Pradesh, Karnataka and Kerala, these names are completely out of fashion.

VII. Strikingly similar SPN and DPN

Apart from the names having -an ending some SPN are strikingly similar to DPN. Some names considered here are:

1. peru:mal

Until the Partition of India, peru:mal was one of the most common SPN. This name is very common among Harijans of Thar region of Sindh also. In fact, the sound system of these speakers of Sindhi have retroflex lateral L, so they pronounce it as peru:maL. About fifteen years ago, the name of their chief was peru:mal. Along with peru:mal, two other SPN - pheru:mal and bheru:mal - are also very common. Etymologically, pheru:mal and bheru:mal can easily be traced to DPN peru:maL. peru:maL is a very common personal name found in Tamil Nadu.

2. kaman

kaman used to be a very common SPN until recent times. It is very difficult to say whether it is a relic of the Dravidian word ka:man meaning emperor, king, great man, leadership (*DED* 1810) or it is from ka:m meaning work. This needs further verification.

3. valaN

valaNmal among Hindus and valaNkhan among Muslims is a common SPN. The meaning of val in Tamil is strong, hard, forcible, skilful (*DED* 4317). val as a word in Sindhi is not found. Instead, b'alu is used to mean strength that may be derived from Sanskrit bala meaning strength. Sindhi also has b'alava:n used to mean strong (man). This can be related to Sanskrit bala. But Tamil has vallan that means strong man (*DED* 4317). We also find valli and vallu in Tamil meaning 'to be able' (*DED* 4317). Sindhi has personal names like valu:mal and vali:ra:m (mal and ra:m being suffixes). This clearly points out to the fact that valan, valu: and vali: bear some relationship with their Tamil counterpart which is more significant than with Sanskrit bal.

4. malai (from DPN) and mal (from SPN)

SPN are either abbreviated or used as full forms; this depends on the addressor's relationship or attitude to the addressee. It is abbreviated if the addressor has a very close relationship or friendship to addressee. If the addressor is inferior in status or younger in age than the addressee, then he uses the full form of the addressee's name. To make full form of a SPN, it is customary to add one of the nine 'second elements' in the following manner:

<i>Abbreviated</i>	<i>'Second Element'</i>	<i>Full form of a name</i>
moti:	ra:m	moti:ra:m
moti:	la:l	moti:la:l
kishin	cand	kishincand
ra:m	nand	ra:ma:nand
parso	mal	parsomal
hem	ra:j	hemra:j
mohan	da:s	mohanda:s
mahesh	kuma:r	maheshkuma:r
som	dat	somdat
ra:m	D'ino	ra:mD'no

Of all these second elements, the use of mal is significant, as in da:somal, ra:dhomal, manghanmal, etc. mal is never used as the first element of a SPN, though ra:m, la:l, da:s, etc. are used as first element also. mal is not an independent word in the Sindhi language. The term malhu though is a word in Sindhi. Its meaning is wrestler. malha is another term in Sindhi. It means wrestling. The word malla in Sanskrit means wrestler. It can be claimed that Sindhi mal is from Sanskrit malla. However, when we see the use of mal as the second element of a personal name, we are certain that we do not get these types of names in Vedic or classical Sanskrit and even in the later period. In DPN, malai is often seen as a second element of personal names. E.g. personal names like thirumalai, anna:malai. The second possibility of the relationship of Sindhi mal to Tamil ma:L as in peru:ma:L also cannot be ruled out. In the absence of records, in the present circumstances mal seems to be closer to Dravidian malai or ma:L rather than Sanskrit malla, because even the word mal meaning 'wrestling, boxing' is claimed to be a Dravidian word by *DED* 3871.

5. celo

celo is a word in Sindhi that means disciple, follower, etc. celo according to Turner is a Dravidian word (CDIAL 4911). There are some SPN using celo as a first element. E.g. celomal, cela:ra:m or even celo. We get two DPN having cela as first members. These are cellamuthu and cellapan. This similarity in Sindhi and Dravidian personal names is due to some historical relation of the two languages. It cannot be ignored as mere chance.

6. -u: ending SPN

-u: ending SPN is a very commonly occurring phenomenon in Sindhi. This -u ending can be seen in names like b'alu:, va:su:, a:lu:, na:ru:, pa:ru:,

Tha:ku:, pursu:, monu:, etc. Some of these names like ba:lu: and va:su: show a striking similarity to DPN.

7. a:yalda:s, a:i:da:s

There are two SPN, a:yalda:s and a:i:da:s, and surnames based on these - a:yalda:sa:Ni:, a:ila:Ni: and a:i:da:sani - which require special mention here. a:yalda:s is from Dravidian word a:ya:L and a:i:da:s is from Dravidian word ay. Both these words - a:ya:L and ay - mean mother (*DED* 364). a:i: is still used to mean mother in the SoDhki, Menghwali, and Koli dialects of Sindhi.

8. -an ending Persian names

There are other kinds of -an ending SPN also. E.g. jashan (happiness), ciman (garden), gulshan (garden), roshan (shining). These names are from the Persian language and in these cases -an is part of the words.

9. -an ending Sanskrit names

There are yet other -an ending SPN like arjan, kishan, kundan, madan, candan, gordhan, govardhan, etc. These names are from Sanskrit and the -an ending in these cases is an indivisible part of the respective words.

10. -an ending female names

The element of -an is so strong in Sindhi that due to analogy, the -an ending is also used for female names; da:dan is one such example. In course of time, this -an suffix became so strong that the final vowel of many female SPN became nasalized. pushpa: became pushpa:~, ra:dha: became ra:dha:~, kala: became kala:~, si:ta: became si:ta:~, etc. (In Sindhi camps like Pimpri, Ulhasnagar, Burhanpur, Bairagarh etc., these nasalized vowel-ending names can be heard even now.) It is only after the Partition that the young generation has switched over to tatsama names like si:ta:, ra:dha:, kala:, pushpa:, etc.

11. -al ending names

Francis Britto (p. 349) in his article on personal names in Tamil society writes that "non-Tamil female name theresa becomes Tamil female name theresal". al is a feminine suffix (S.V. Shanmugam, p. 37). -al as suffix is also found among female SPN like mu:mal, su:mal, motal, etc. On the basis of analogy, this -al suffix is added to male names like baco and bacal, sacu: and sacal, roco and rocal, toto and total, punhu:n and punhal, ra:No and ra:Nal, etc. The similarity of the -al suffix in both Tamil and Sindhi personal names is striking and cannot be dismissed as mere chance.

IV. Place Names

Sindh has been the seat of the Indus Valley Civilization, as is evident from the excavations of the Mooan-jo-daro. From time to time Sindhi speakers came in contact with the speakers of Sanskrit, Arabic, Persian and English languages. This is clearly evident from the names of places in Sindh. Historically, we know that Sindhi speakers did come in contact with the speakers of the above-mentioned languages. But place-names in Sindh show significant Dravidian influence, which clearly suggests that history needs to dig deeper. Place names in Sindh may be classified into three broad categories. One is the category of place-names that have two elements. E.g. TanDoa:dam, shika:rpur, koTD'cji, pairi:nagar, g'aRhi:ya:si:n. Another category is of place-names with personal names. E.g. j'a:msa:hib, da:du:, moro. These are personal names used as place names without any prefix or suffix. A few examples are also found of place-names after the names of tribes. E.g. ghoTki (after the ghoTak tribe), la:Rka:No (after the la:rak tribe). The source of the third category is not known. E.g. ba:Dahi, gaDiro.

Various influences on place-names in Sindh

1. The English Influence

The British ruled over Sindh from A.D. 1843 to A.D. 1947. The British government started schools and colleges, giving English an important role to play as a subject and as a medium of instruction. It also introduced English for court and administrative purposes. Influence of English can be seen on various aspects of Sindhi language and culture. As far as place-names are concerned, there is only one suffix, roD, used in naming towns. This roD is nothing but the English 'road'. Some examples of place-names with the roD suffix are si:ta:roD, la:kha:roD, DrigroD.

History offers an interesting explanation of the roD suffix of place-names. When the British government introduced the railways in Sindh, it was found that the towns were at a distance of a few kilometres from the rails. To facilitate the inhabitants of those towns, the government built stations at points nearest to the towns. Stations were named by adding the roD suffix to the name of the respective town. In course of time, the towns expanded to reach the station.

2. The Persian Influence

The British government introduced Sindhi and English for educational purposes only in 1853. Before the British conquest of Sindh in 1843, Persian was the only language used in the fields of education and literature. Though the rulers themselves were speakers of Sindhi, Persian

was the language used for court and for all official purposes. The influence of Persian is reflected in the place-names in Sindh.

i. a:ba:d

a:ba:d is a Persian word meaning 'a city, habitation, full of buildings and habitations' (Stg. p. 3). a:ba:d occurs only as suffix in place-names in Sindh. hedra:ba:d, jekba:ba:d, etc. are some of the place-names with a:ba:d as suffix.

ii. Dero

The meaning of Dera: or Di:ra: is house, habitation, or tent (Stg. 552). Dera: becomes Dero in Sindhi. o is a masculine suffix in Sindhi. panjuDero, bangulDero and ratoDero are some of the place-names in Sindh with Dero as the suffix. Dero never occurs as a prefix.

iii. bandar

bandar is a Persian word denoting 'inlet (of the sea), harbour, anchorage, seaport, emporium, city, trading town on the sea to which number of foreign merchants resort' (Plts p. 169). gidu:bandar and sha:hbandar are some of the place-names with bandar as a suffix. Both these are located on banks of rivers.

iv. baza:r

baza:r is a Persian word denoting market, market day (Stg. p. 144). The place-name, rahmkibaza:r, is used as a suffix.

3. The Sanskrit Influence

At the time of the Arab conquest of Sindh in A.D. 712, the ruler of Sindh was a Brahmin, Raja Dahir. Sanskrit was the language of learning during this Brahmin rule in Sindh. This is evident from the fact that the first few books to be translated by the Arabs were Sanskrit books of various fields of knowledge. (For details, see Nadvi.) There are some place-names that clearly show Sanskrit influence.

i. pur

This suffix is very commonly used in place-names. Some of the place-names with the pur suffix are: nasarapur, marikhpur, ra:Ni:pur, sha:pur, unaRpur, b'uDha:pur, shika:rpur, etc. pur is not used as a prefix. Etymologically, pur is related to Sanskrit puri: meaning a town, etc. (M.W. p. 636).

ii. nagar

nagar is used both as a prefix and as a suffix. nagarpa:rkar and pa:ri:nagar are place-names with nagar as a prefix and a suffix, respectively. Etymologically nagar meaning a town, city (M.W. p. 525) is from Sanskrit.

iii. g'oth

The word g'oth can be derived from Sanskrit word goshTh meaning cow, pen or refuge (M.W. p. 367). g'oTh as a word in Sindhi is used to mean a village or a hamlet. It is used only as a suffix in place-names in Sindh. Some examples with g'oTh suffix are: pi:rg'oTh, perumal-jo-g'oTh, himayung'oTh, etc.

iv. sar

The word sar can be related to the Sanskrit word sar meaning a lake or pond (M.W. p. 1182). bhoD'esar is the only place-name found in the Thar region of Sindh having sar as a suffix.

v. tha:No

tha:No in Sindhi literally means a police station. Its etymology can be traced to Sanskrit word sthan meaning place, dwelling place or locality, etc. (M.W. p. 1263). tha:Nobu:la:Xa:n is the only place-name having tha:No as a prefix.

4. The Dravidian Influence

Raja Rai Sahasi of Sindh was considered to be a Shudra. It was customary to call a non-Aryan a Shudra; but it is difficult to say conclusively that he was a Dravidian. However three Dravidian tribes are definitely found in Sindh. These are the Brahui, the oD'a and the Muha:Na:. (Refer to Section III for more details.) The presence of these tribes in Sindh cannot be denied. The study of place-names of Sindh strikingly reveals the presence of two Dravidian suffixes. Interestingly, these suffixes of Dravidian place-names are used as prefixes in Sindhi place-names.

i. TanDo

TanDo as a word is not found in the Sindhi language; but it is found as a prefix to place-names in Sindh. Etymology of the this term can be traced to the Dravidian languages: Malayalam tantu meaning detachment, troop; Telugu tanda meaning caravan, herd, troop, encampment; Kannada tanda meaning 'mass, multitude, crowd, troop (DED 3055). Some place-names with differing forms of the term tanda seen in the south of India are ta:ntonimalai in Tamil Nadu, tandarankadu in Kerala. TanDo shows

the regular phonological changes of Dravidian to Sindhi: (i) voiceless t and d of the Dravidian languages becoming voiced T and D in Sindhi, (ii) vowel-ending u and a of the Dravidian terms changing to o in Sindhi. o is the masculine suffix in Sindhi. Some place-names in Sindh with TanDo as prefix are TanDorahi:mxā:n, TanDoa:dam, TanDoj'a:m, TanDomohamad-Xa:n, etc. (x is pronounced as the Persian or Arabic kh and X as Persian or Arabic gh.)

ii. koT

amarkoT, naokoT, etc. are some of the place-names of Sindh with koT as a suffix. In koTD'ejī and in some other names also koT is used as a prefix. The word koT in Sindhi means a fort and its diminutive form is koTRi:. Incidentally, koTRi: is also the name a small town in the da:du district of Sindh. Etymologically, koT can be traced to Dravidian term koTai found in Tamil, Malayalam to mean fort (*DED* 1831). koT is recorded in Sanskrit dictionaries as also in Shilpa literature; here also it means a fort (M.W. p. 312). koT as a prefix and suffix is used in many place-names in the south of India. E.g. cennikkoTu, koTaikaNa:l in Tamil Nadu.

5. Place-names of Sindhi origin

daRo and va:haN are two suffixes that can be said to be of Sindhi origin.

i. daRo

The literal meaning of daRo in Sindhi is a mound. daRo (without suffix or prefix) is a village name in the da:du and ThaTa: districts of Sindh. daRo as a suffix is also used in some place-names especially some ancient towns excavated by archaeologists. E.g. mooan-jo-daRo, kanhu-jo-daRo; both towns excavated from "mounds". Hence, the use of the term daRo.

ii. va:haN

The literal meaning of the term va:haN in Sindhi is a hamlet. Xa:nva:haN and a:li:va:haN are two place-names with the va:haN suffix.

In the above data of place-names in Sindh, we see the Sanskrit, Persian and English influences. The origin of these influences is also historically proved. The two affixes of TanDo and koT are definitely the direct result of Dravidian contact with Sindhi-speaking people of Sindh. The linguistic proof of this contact is quite obvious; archaeology also believes in the Dravidian inhabitation of the Indus Valley; only this contact is yet to be proved historically.

V. Household Items

The words discussed in this section deal with items/articles of day-to-day use. Most of the terms discussed here are still being used in the daily life of Sindhi speakers in Sindh and India. Except *ca:D'i:*, almost all the other words have survived among Indian Sindhi speakers. In the case of some terms like *ma:Ri:*, some new coinages like *b'ima:R* and *b'ahu:ma:R* have also been formed by Sindhi speakers in India. Considered here are some Sindhi words that are identical to Dravidian words.

1. *ma:Tu*, *ca:D'i:*

ma:Tu and *ca:D'i:* are two words used for an earthen pot in Sindhi. These two words are of Dravidian origin. In Sindhi, *maTu* is a large earthen vessel. In Dravidian languages, *maTa* is a large earthen vessel (*DED* 3801). In Sindhi, *ca:D'i:* means an earthen vessel. In Tamil, *caTi:* means exactly the same (*DED* 1901). Tamil *caTi:* becomes *ca:D'i:* in Sindhi. Here *caTi:* has undergone two regular phonetic changes. Voiceless Tamil T has changed to voiced D in Sindhi, and D has taken its implosive form D'.

2. *ma:Ri:*

In Sindhi, the word for up stair house or terrace is *ma:Ri:* (*Bal* 2566). This is also used in *b'ahuma:R* (multiple-storied), *b'ima:R* (double-storied), *Tima:R* (triple-storied) etc. In Tamil *ma:Ti:*, pronunciation *ma:Ri:* (*DED* 3930) is used in exactly the same meaning.

3. *ta:Ri:*

In Sindhi, *ta:Ri:* means a latch or bolt. In fact, in olden times there were no locks but wooden latches instead, which were called *ta:Ri:*. This word has been preserved in a very common compound word, *haT-ta:R*, meaning closure of shops. In the Banni region of Kutch, this word is in use even today. In standard Sindhi, this word, however, has undergone certain phonetic changes to become *haRta:l*. Its meaning too is extended to mean strike (and therefore closure of shops). Tamil *ta:R* is used for latch and bolt (*DED* 2598). The 'i:' in Sindhi is a feminine suffix.

4. *thu:Ni:*

The word *thu:Ni:* in Sindhi stands for pillar, post or column. In Tamil, *tūN* is used in the same meanings (*DED* 2780). The phonetic changes here are: unaspirated t of Tamil has changed to aspirated th in Sindhi, the short vowel u of Tamil has become long u: in Sindhi, and feminine suffix i: is added in Sindhi. Sanskrit also has *sthu:Na* for pillar but this does not have any Indo-European cognate.

5. cimTo, cimTi:

These two words are used in Sindhi to mean fork. cimTo (with masculine suffix o) indicates a bigger fork than cimTi: (with feminine suffix i:) which means a smaller fork. Tamil has cammaTi for large hammer of a smith (*DED* 1941). In this case, some semantic change has taken place. Significantly, however, both imply tools used by a smith.

6. dono

In Sindhi, dono means a cup made of leaves. Tamil has tonai meaning cup made of leaf-plantain or other leaf (*DED* 2913). There is no semantic change here. The phonetic features are regular. Tamil t has become d in Sindhi, and o is the masculine suffix in Sindhi.

7. ka:nvaThi:

ka:nvaThi: in Sindhi means pole used for carrying burden. Tamil has ka:va:ti meaning pole used for carrying burden (*DED* 1193). Interestingly, soDhki, a caste dialect of Sindhi, still uses ka:va:Ri:. Here, the retroflex R is maintained and therefore the pronunciation of soDhki ka:va:Ri: is identical to Tamil ka:va:ti:.

8. noR

noR in Sindhi is the word used to signify rope, especially one that is thick and big. noRi: is the word used to signify a rope that is thin and small or a string, a cord. Tamil na:N and Kui:noRu and noNu all mean string, cord, bowstring (*DED* 2369). In this case, we see that the Kui pronunciation of the word noRu is almost identical to the Sindhi word noR.

9. g'u:N

g'u:N in Sindhi is the word used to mean a sack made of jute or a gunny bag. In Tamil, koNi means the same (*DED* 1835). The phonetic change seen here is: voiceless k of Tamil becomes voiced g in Sindhi.

10. capar

In Sindhi, the word capar is used for a chip of wood. The Tamil word cappai is used to mean a spar of wood placed for the wheels of a cart to run smoothly in a sandy road, rafter, a chip of wood (*DED* 1932).

11. ulo

ulo in Sindhi is the word used for a live charcoal (Bal p. 248). In Tamil, ulai is used to mean a fireplace, forge, furnace (*DED* 2337). The semantic change here is clearly very little. The phonetic change here is: o ending

in Sindhi takes place of ai ending of Tamil. This is a regular feature. o is masculine suffix in Sindhi.

12. vaTi:

A word for a small dish in Sindhi is vaTi:. A bigger utensil of the same specification is called vaTo in Sindhi. Tamil has vaTi meaning basket made of palm stem fibre (*DED* 4277). In this case, the meaning has extended from palm stem fibre to the contemporary metallic. Looking to the period of life of the Sindhi language, this semantic change is possible.

13. paTu

In Sindhi, the word paTu is used to mean flat or level surface or ground. In Tamil, paTam means flat or level surface of anything (*DED* 3207). The meaning of Sindhi paTu and Tamil paTam is identical. Here an ending of Tamil becomes u in Sindhi.

14. seRhi:

seRhi: is the word used in Sindhi for earthy material used for white washing walls. This word can be etymologically related to Dravidian words of the same meaning. *DED* 2305 records: ceTi Malayalam ('a glutinous earth put on walls to keep off the rain, esp. red'), jeDi - Kannada ('a sort of pipe clay'), seDi - Tulu ('a glutinous clay, chalk, a kind of white earth'). In this case, we see that the Sindhi word seRhi: is very close in form and meaning to the Tulu word seDi.

15. tandu

tandu in Sindhi means stalk, stem, wire, a strand of a rope, fibre, a thread of gold. In Tamil, tantu is a thread, cord, string, line, wire, filament, fibre (M.W. p. 436, col. I) stalk, stem (*DED* 3056).

16. ta:r

ta:r in Sindhi means rope, string. In Tamil, ta:r / ta:ram means cord, rope (*DED* 2586).

17. ka:n

ka:n in Sindhi refers to joint, as in bamboo cane. In Tamil, ka:N refers to the same (*DED* 974).

18. baraNi:

baraNi: in Sindhi means china jar or vase. In Tamil, paraNi: means china jar or jewel casket (*DED* 3260). Malayalam baraNi means china jar.

The only phonetic change that takes place here is: voiceless p of Tamil becomes voiced b in Sindhi.

19. Topo

In Sindhi, Topo means stitch. In Tamil, tai means to stitch, sew. In Malayalam, taipu means needlework. In Kannada, tepe is a patch (*DED* 2858).

20. pu:Ni

In Sindhi, pu:Ni means cotton, rolled cotton. In Tamil, paNci means cotton. In Malayalam, paññi means cotton (*DED* 3173). In this case, the Sindhi term pu:Ni appears to be closer to the Malayalam term paññi. Here, the vowel a of Malayalam changes to u: in Sindhi.

21. kaRhi:

kaRhi: in Sindhi is a type of curry in which many vegetables are put. In Tamil, kaRi means vegetables (*DED* 1170). The semantic difference is not much. The phonetic change is: unaspirated R in Tamil becomes aspirated Rh in Sindhi.

22. kash

kash in Sindhi means barley. In Tamil, the word kaj means barley (*DED* 926). Here, Tamil j becomes sh in Sindhi.

23. ka:cu

One of the meanings of the word ka:cu in Sindhi is a kind of metal. In Tamil, ka:cu means gold, gold coin, money, a small copper coin (*DED* 1200). Semantically, the two are the same.

24. capo

capo in Sindhi means a piece of specially moulded wood from bamboo. Tamil cipu means wooden brace to a door driven into the ground when bolting (*DED* 2155).

25. a:ηaNu, aηaNu

aηaNu, a:ηaNu in Sindhi means courtyard. In Tamil, akam means side home (*DED* 8). Semantically, the two are the same. Here, voiceless k of Tamil becomes voiced, nasalized η in Sindhi, and nasal m of Tamil becomes retroflex N in Sindhi.

26. veRhi, vaR, vaNa-veRhi

veRhi (also vaR, vaNa-veRhi) in Sindhi means fence, hedge or wall. The Tamil word vēli means fence, hedge or wall (*DED* 4556). Here, Tamil l becomes retroflex, aspirated Rh in Sindhi.

27. thadh

thadh in Sindhi means cool, cold. In Tamil, taN means cool, cold. In Tamil, taNNir is cold water (*DED* 2473). In Sindhi, thadhero means cold water. The changes here are: retroflex N of Tamil is replaced by aspirated dh in Sindhi, and the o ending is the masculine suffix in Sindhi.

28. culhi

culhi in Sindhi means fireplace, furnace which is quite close to Tamil cullai (*DED* 2233) meaning potter's kiln, furnace. In Sanskrit, culli is fireplace. In Prakrit also, culli means fireplace.

29. a:vi

a:vi in Sindhi means potter's kiln (*P.M. Sindhi-English Dictionary*, p. 37). This is exactly the word used in Kannada a:vi to mean potter's kiln. In Tulu, a:ve means oven. In Telugu, a:vamu means potter's kiln (*DED* 336).

30. D'ahi

D'ahi in Sindhi means curd. The word tayir in Tamil means curd (*DED* 2517). The changes here are: the final r of Tamil has been dropped in Sindhi, voiceless t of Tamil has become voiced implosive D in Sindhi, and yi in Tamil has become hi in Sindhi over the passage of time.

31. aTo

aTo in Sindhi means pounded flour as of wheat, rice, etc. This is close to Tamil aTu meaning to pound as rice, etc. (*DED* 67).

32. ca: ~ var

ca ~ var in Sindhi refers to rice and chuRyal ca: ~ var means rice (every grain can be separated, possibly because it is boiled in a particular way). In Tamil, cōru is boiled rice (*E.M.* p. 52).

33. palo

palo in Sindhi is a river-fish, considered a delicacy. This is close to Tamil pulai, pulavu, putal meaning flesh, raw meat, fish (*DED* 3718).

34. taro

In Sindhi, taro denotes the bottom part of a utensil. In Tamil, the word taRi is a large pan or vessel with a wide mouth (*DED* 2600). Another word in Sindhi close to Tamil ta:ri is tai which in Sindhi means a pan with a loud mouth.

35. pa:T

pa:T in Sindhi refers to an oil dish. Malayalam pa:Tam refers to an oil dish (*DED* 3345).

36. taD'o

taD'o in Sindhi refers to mat. In Tamil, taTi refers to mat (*DED* 3036). Here, voiceless T of Tamil changes to voiced, implosive D' in Sindhi.

VI. Numerals

'iTi Dakaru' is a tip-cat game played by children in Sindh (Pakistan) and Kutch (India) even today. Interestingly, the counting in this game follows the Dravidian system of counting. The following chart explains this.

<i>English</i>	<i>In the Sindhi game</i>	<i>In Dravidian</i>
One	bakatu	Tel. vakati
Two	len (this was originally 'ranD' which is also an abusive term in Sindhi)	Tam. iranDu Tel. renDu Mal. renDu
Three	mu:N	Tam. mu:Nu Tel. mūḍu Mal. mūNNU
Four	na:ru	Tam. na:lu Tel. na:lu Mal. na:lu
Five	anju	Tam. anju Tel. enu Mal. anju
Six	a:ru	Tam. a:ru Tel. a:ru Mal. a:ru

This similarity cannot be put aside as mere chance. In standard Sindhi numerals, panju meaning 'five' is close to the Tamil and Malayalam

anju meaning the same. In all these, the ending vowel sound u is almost inaudible to a non-native speaker of these languages.

VII. Miscellaneous Items

This section includes verbs, adjectives, adverbs and also nouns commonly used in the Sindhi language.

1. ku:R

ku:R in Sindhi 'falsehood'. In Tamil, koL 'falsehood' (*DED* 1865). ku:R in the Menghwali (see appendix) dialect of Sindhi is ku:L. The changes here are: retroflex lateral L of Tamil is retained in the Harijan dialect of Sindhi, and standard Sindhi has given up this retroflex lateral L. It is replaced with retroflex R.

2. nanDhi:

nanDhi: in Sindhi 'small'. In Tamil, nanni 'that which is small' (*DED* 3008).

3. ca:Rhi

ca:Rhi in Sindhi 'an upward incline'. ca:Rhi is sometimes used as suffix in place-names. E.g. tilakca:Rhi in Hyderabad. In Tamil, cari 'incline' (*DED* 1950). Here, the r of Tamil > retroflex, aspirated Rh in Sindhi.

4. soRho

soRho in Sindhi 'narrow'. soRho is the masculine form and the feminine form is soRhi:. In Tamil, curam 'narrow and difficult path' (*DED* 2210). In this case, the semantic difference is only slight; in Tamil, curam is narrow path; in Sindhi, soRho / soRhi is anything narrow. The changes are: Tamil c > s in Sindhi, Tamil unaspirated r > retroflex, aspirated Rh in Sindhi, and the am ending of Tamil > o, i: in Sindhi is a recurrent feature.

5. ka:ro

ka:ro in Sindhi 'black'. In Tamil, karu 'black' (*DED* 1073). o in Sindhi is the masculine suffix.

6. sima

sima in Sindhi 'moistness'. Baloch (p. 1647) gives the etymology of sima as derived from Sanskrit word sar meaning a pond. On a closer look at the Dravidian etymology semal, we see that semal means water in Tamil. In

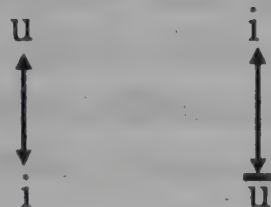
Tulu, sima 'moistness' (*DED* 3093). In my opinion, Dravidian etymology is closer to Sindhi word sima. The Sanskrit word sar is not only semantically different but it is also phonetically different, especially when a comparative study of the Dravidian words is made.

7. a:li

a:li in Sindhi 'wet'. The i ending is the feminine suffix in Sindhi and o is the masculine suffix in Sindhi a:lo. Both a:li and a:lo mean wet in Sindhi. Tamil a:li 'raindrop' (*DED* 327). Semantically, the Tamil and the Sindhi words are very close.

8. ciru

ciru in Sindhi 'whirlpool'. In Tamil, curi 'whirlpool' (*DED* 174). Metathesis has taken place here.



9. va:c

va:c in Sindhi refers to 'rain or dust storm'. Tamil vaci 'rain-water' (*DED* 4264).

10. pa:Ni:

pa:Ni: in Sindhi refers to 'water'. Tamil pani 'to be bedewed or rain incessantly' (*DED* 3322). Semantically, the two are very close.

11. Ta:No

Ta:No is the oldest recorded word for 'time' in Sindhi. It occurs in a Sindhi nursery rhyme:

"wa:h re ta:ra:gol ta:ra:
sa:njhia Ta:Ne nikro tha:...."
meaning "o star come you in the evening Time".

Ta:Ne is the changed form of Ta:no. Both mean the same, i.e. time or moment. Tamil tavanai 'time'. Here, Tamil ai > o in Sindhi.

12. D'aD'u

In Sindhi, D'aD'u or jaD'o are words that mean a blockhead, stupid, ignorant person. In Tamil, daDa has the same meaning. In Kannada, jaDu means callosity (*DED* 1910).

13. Da:Dho

Da:Dho in Sindhi 'strong, hard'. Da:Dhu is the noun form meaning 'strength, stiffness, hardness, toughness'. Tamil taTa 'large, broad, full'. Kui DaTa 'strength, power, hardness, stiffness, toughness' (*DED* 2449). The changes show that the voiceless t of Tamil > voiced, retroflex D in Sindhi.

14. motho, muD'o

motho, muD'o in Sindhi are terms that refer to a person who is a 'dullard, an idiot'. Tamil moTu 'a dullard or lazy person' (*DED* 4202).

15. muD'i, muD'o

muD'i, muD'o in Sindhi 'that which is blunt (as a knife)'. Tamil moTai 'bluntness as of knife' (*DED* 4199). Tamil mokaTTai also means bluntness (*DED* 4192). Kannada moNDa, mondu, monDe 'blunt'. Here, the voiceless, retroflex T of Tamil > voiced, retroflex D in Sindhi, and final ai of Tamil > i or o in Sindhi.

16. koh

koh in Sindhi 'mountain'. koghiya:ro 'inhabitant of the mountains'. Tamil ko 'mountain' and koya: is a tribe of mountaineers (*DED* 1811). In the La:Ri dialect of Sindhi, koh becomes ko and koghiya:ro becomes koya:ro. Sindhi often appears to add the aspirated implosive h at the word-endings where Tamil has none.

17. patti

patti in Sindhi 'a small field or a share of a field'. Tamil paTTi 'small field' (*DED* 3357).

18. paha:R

paha:R in Sindhi 'mountain, hill'. This is close to Tamil porai 'mountain, hill' (*DED* 3730).

19. meTu

meTu in Sindhi refers to mud from a mound. In present-day Sindhi, it refers to a particular type of mud from Sindh. Tamil mēTu 'mound, heap of earth' (*DED* 4151). Semantically, the two are the same.

20. aRal

aRal in Sindhi refers to 'black sand found on the seashore'. In Tamil, aRal means the same (*DED* 263).

21. haru

haru in Sindhi 'plough'. In the La:Ri dialect of Sindhi, it is pronounced as ar. In Tamil, the word for plough is ēr. In this case, clearly, Tamil ēr is closer to the La:Ri dialect form but if we look at the standard Sindhi haru, the addition of h is a regular feature in Sindhi.

22. Tungu, Trungu

• Tungu, Trungu in Sindhi 'hole'. Tamil Tonku 'hollow or hole in a tree, wall' (*DED* 2423). Semantically, the change is not much. In Tamil, the meaning is restricted to hole or hollow in a tree. In Sindhi, it is used to mean hole or hollow in general. In Malayalam, tunga or tungra means hollow of a bamboo (*DED* 2743). The phonetic change from Tamil to Sindhi is a regular one. Voiceless velar k > voiced velar g.

23. Tanḡa

Tanḡa in Sindhi 'to hang'. Tamil tuNku or Tonku 'to hang or be suspended' (*DED* 2777). Here again, the phonetic change is a regular one. Nk of Tamil > ṅg in Sindhi.

24. poru

poru in Sindhi 'to hollow'. It is close to Tamil porai 'hole or hollow in tree, cavern' (*DED* 3765).

25. khaDa

khaDa in Sindhi 'a hole dug in the earth'. Tamil kuTai 'depth, pool' (*DED* 1389). The phonetic changes are regular. Unaspirated k of Tamil > aspirated kh in Sindhi, and voiceless T of Tamil > voiced D in Sindhi.

26. kunDa

kunDu in Sindhi 'angle'. Tamil koN 'angle' (*DED* 1834).

27. kha:TT

kha:TT in Sindhi 'burglary'. Tamil kaNNam 'hole made by burglars in a house wall' (*DED* 1188). The phonetic change of Tamil unaspirated k to aspirated kh in Sindhi is a regular change. The change in the pronunciation of

Tamil NN to TT in Sindhi is not impossible keeping in mind the ages that have passed.

28. cori

cori in Sindhi 'robbery'. Another term for robbery or snatching is phuri. Tamil curai 'robbery' (*DED* 2264).

29. iTu

iTu in Sindhi 'to hit against'. Tamil iTu 'to hit against' (*DED* 376). From the word iTu, the term iTi D'akar is derived in Sindhi. iTi Dakar is the tipcat game played by children. In Tamil, the term kiTi is used for the same game.

30. varu

varu in Sindhi 'twist or bend'. Tamil valai 'become crooked' (*DED* 4349). Semantically similar, the phonetic changes here are: ai ending of Tamil > u ending in Sindhi, and l in Tamil > r in Sindhi.

31. thelo

thelo in Sindhi 'to push, force forward'. Tamil taLu 'to push, force forward' (*DED* 2599).

32. vara:ko

vara:ko in Sindhi 'to cause to go'. Tamil varanku 'to cause to go' (*DED* 4330).

33. vari

vari in Sindhi 'again'. Tamil mari 'again and again' (*DED* 4311). The only change to have taken place here is: Tamil m > v in Sindhi.

34. varu

varu in Sindhi 'to turn or to come back'. Tamil varu 'to come' (*DED* 4311).

35. varu

varu in Sindhi refers to an error, fault, failure (g'aal mein varu). In Tamil also, one of the meanings of varu is error, fault, failure (*DED* 4336).

36. veru

veru in Sindhi 'anger against enemy, enmity'. Tamil veru 'fear, dread' (*DED* 4519). Semantically, the two are quite close.

37. varavara

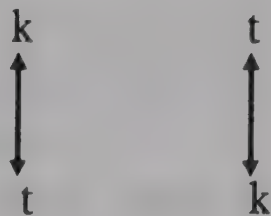
varavara in Sindhi 'gradually, repeatedly'. Tamil varavara 'gradually, further and further' (*DED* 4311).

38. pakko

pakko in Sindhi 'roasted, cooked'. pacaNu 'to cook, to roast'. Tamil vakku 'to burn, roast' (*DED* 4259). Here, Tamil v replaces p in Sindhi.

39. takaR

takaR in Sindhi 'haste'. Tamil kataR 'haste' (*DED* 999). This is clearly a case of metathesis.

**40. phaTa:phaT**

phaTa:phaT in Sindhi implies 'great haste, hurry'. In Tamil, paTapaTa means the same (*DED* 3179).

41. poi

In Sindhi, poi 'afterwards'. Tamil po 'to go' and poki means afterwards (*DED* 3734).

42. vijhu

vijhu in Sindhi 'to put, drop, cast as net'. Tamil vicu 'to throw, fling, drop, cast as net' (*DED* 4479). Here, voiceless, unaspirated c of Tamil > voiced, aspirated jh in Sindhi.

43. Tapu

Tapu in Sindhi 'to jump, leap'. Tamil ta:vu 'to jump up' (*DED* 2596). The changes here are: t of Tamil > retroflexed T in Sindhi, and Tamil v > Sindhi p.

44. aD'a

aD'a in Sindhi 'obstruction'. Tamil aTai 'to shut, close, obstruct, block (as passage)' (*DED* 73).

45. vaDh

vaDh in Sindhi 'to cut as with sword or axe'. Tamil veTu means the same (*DED* 4507). The phonetic changes taking place here are regular. Voiceless, unaspirated T of Tamil > voiced, aspirated Dh, and the change of the vowel sound e to a should be ascribed to time.

46. phuTi

phuTi in Sindhi 'dawn'. Tamil veTi 'to dawn' (*DED* 4504). Here, the phonetic changes are: v of Tamil > p which is then aspirated to ph: v→p→ph.

47. kal

kal in Sindhi 'to knead or to mix as dough'. Tamil kala 'to mix'. Ko. kalu 'to knead' (*DED* 1092).

48. kaDh

kaDh in Sindhi 'to emit, vomit'. Tamil kal 'to vomit' and in Ka., ka:r 'to vomit, emit' (*DED* 1236).

49. valar

valar in old Sindhi refers to many or several, especially cattle or people. In Tamil, pala means many and palar means many or several persons (*DED* 3289). Here, the p of Tamil > v in Sindhi (usually, it is the other way around, i.e. Tamil v > p in Sindhi).

50. guRguR

guRguR in Sindhi 'to rumble, rattle'. Tamil kuTukuTu 'to rumble, rattle' (*DED* 1382). The phonetic changes here are regular ones. Voiceless k of Tamil changes to g in Sindhi, and retroflex voiceless T of Tamil becomes retroflex voiced D in Sindhi. This D changes to R because of similar pronunciation.

51. gidi

gidi in Sindhi means dwarfish, small. A common idiom in Sindhi is 'gidi men gutal nanDho b'a:r' where gidi refers to a small or young boy. In Kannada, gidu is shortness, smallness. In Tamil, kuTam is smallness (*DED* 1390). Semantically, the change is not much. The phonetic changes are the

regular ones. Voiceless k of Tamil > voiced g in Sindhi, and voiceless T of Tamil > voiced 'd' in Sindhi.

52. puaNu

puaNu in Sindhi 'to tie (as garland), unite'. Tamil puNai 'to unite, tie' (*DED* 3423).

53. kaRa

kaRa in Sindhi 'shore, border of cloth'. Tamil karai 'shore, border of cloth' (*DEDR* 1293).

54. sal

sal in Sindhi 'express, say, speak' (as in g'a:lsalaN). Tamil col 'to say, speak, tell, mention, utter, express' (*DED* 2335). Another word for speak in Sindhi is cav.

55. kaDi

kaDi in Sindhi 'ripening' (as of wound - phaTu jo kaDi ba'adhaN). Tamil kaLi 'to ripen well' (*DED* 1163). Here, L of Tamil > D in Sindhi. Retroflex L and D sound similar.

56. jheRo

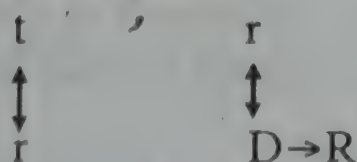
jheRo in Sindhi 'quarrel, fight'. Tamil cero 'battle, quarrel, fight' (*DED* 1631). Voiceless, unaspirated c of Tamil changes to voiced, aspirated jh in Sindhi. In the La:Ri dialect of Sindhi, jhero is pronounced as jero.

57. thapha

thapha in Sindhi 'a blow, slap'. Tamil tapai 'a blow' (*DE* 2503). The changes are regular. Unaspirated t of Tamil > aspirated th in Sindhi, unaspirated p of Tamil > aspirated ph in Sindhi, and the vowel-ending ai of Tamil > a in Sindhi.

58. raRa

raRa in Sindhi 'roar'. Tamil teri 'roar' (*DED* 2824). The phonetic changes that have taken place here are: voiceless t of Tamil > voiced, retroflex D in Sindhi, D has then changed to R (the two sound quite similar), and a metathesis has taken place.



59. TiTu

TiTu in Sindhi 'fart, break wind'. Telugu piTu means the same (*DED* 3428). Here, initial p of Telugu has been replaced by T in Sindhi.

60. carako

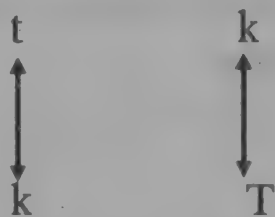
carako in Sindhi 'late'. Tamil caraka 'quickly, speedily' (*DED* 1943). In this case, clearly, the meaning has become an antonym. Is the antonym just a chance or does it suggest a definite relationship?

61. j'ul

j'ul in Sindhi 'to move, go'. Kannada tu:L 'to move, go' (*DED* 2792). tu:L is also close to tor in Sindhi which means 'gait, way of moving'.

62. kaTu

kaTu in Sindhi 'rust'. Tamil tuku 'rust' (*DED* 2747). The phonetic changes are regular. t of Tamil has been replaced by retroflex T in Sindhi, and metathesis has taken place.



63. si:Ta

si:Ta in Sindhi 'stiff'. Kannada siDe or seDe 'to become stiff as a limb, rope' (*DED* 2150). The change that has taken place is the reverse of the regular kind. Voiced retroflex D of Kannada > voiceless, retroflex T in Sindhi.

64. saTa

saTa in Sindhi 'to beat, thrash'. Tamil caTu 'to beat, thrash' (*DED* 2023). The changes here are: c of Tamil > s in Sindhi, and u vowel ending of Tamil > a in Sindhi.

65. vayam

vayam in Sindhi refers to delivery of child. In Tamil, vayam refers to desire, morbid longings of pregnant woman (*DED* 4297). Semantically, the two are not very different.

66. vau

vau in the Kutchi dialect of Sindhi refers to bride, wedding, wedding garland, sexual union. In Tamil, vatuvai refers to the same (*DED* 3841).

67. mi:raNu

mi:raNu in Sindhi 'healing'. Kui ma:Ra 'to heal over' (*DED* 3938).

68. vara:iN

vara:iN in Sindhi 'to turn or twist' and angutho vara:iN 'turning the thumb' means 'to write, inscribe, paint, draw'. Tamil vari 'to write' and varai 'to write, inscribe, paint or draw' (*DED* 4304).

69. tuta:ri

tuta:ri in Sindhi is a musical instrument, a kind of bugle horn. In Tamil, tuta:ri means a bugle horn (*DED* 2718).

70. telaṅg

telaṅg in Sindhi is the name of a raga - a musical composition. In Tamil, tila:nā is a kind of musical composition ending with the expression tila (*DED* 2664).

71. bili

bili in Sindhi 'cat'. Tamil pili 'cat' (*DED* 3438). Here, voiceless p of Tamil > voiced b in Sindhi. This is an example of another regular change. In Sanskrit, the term for cat is bilal. Obviously, Sindhi bili is closer to Tamil pili than to Sanskrit bilal.

72. mi:n

mi:n in Sindhi 'fish'. Tamil mi:n 'fish' (*DED* 3999).

73. toto

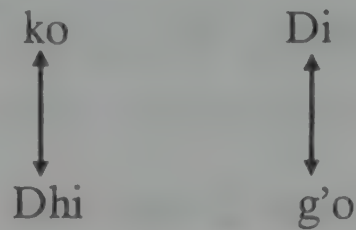
toto in Sindhi 'parrot'. Tamil totai 'parrot' (*DED* 2491). The phonetic changes here reflect the regular pattern of change. The ai ending of Tamil > o in Sindhi.

74. ta:Ri

ta:Ri in Sindhi 'a heron' (a water bird). Tamil ta:ra: 'duck, a heron' (*DED* 2588). The phonetic changes are regular. The r of Tamil > retroflex R in Sindhi, and the final vowel a: of Tamil > i: in Sindhi.

75. Dhag'o, Dhig'o

Dhag'o, Dhig'o in Sindhi 'a young bull'. Telugu koDe 'young bull'. Kui koDi 'cow, ox' (*DED* 1823). Here, voiceless k of Kui > voiced, implosive g in Sindhi, the unaspirated D of Kui > aspirated Dh in Sindhi, and metathesis has taken place.



76. pa:D'o

pa:D'o in Sindhi 'male buffalo'. Tamil pōttu 'male buffalo' (*DED* 3747). Voiceless T of Tamil > voiced, implosive D' in Sindhi.

77. D'and

D'and in Sindhi 'bull, ox'. Kannada gonde 'bull, ox' and Konda 'bullock' (*DED* 1837). Here, k of Kannada > D in Sindhi.

78. jhanglo

jhanglo in Sindhi refers to 'a fence to keep out the herd'. In Kannada, jangali is 'herd' and in Tamil, it is 'herd of cattle' (*DED* 1884). The semantic change is not much. Regular phonetic changes: unaspirated j of Tamil > aspirated jh in Sindhi.

79. sipi

sipi in Sindhi 'pearl, oyster, oyster shell'. Tamil, Malayalam cippi 'pearl, oyster, oyster shell' (*DED* 2089). Prakrit sipi 'oyster shell'.

80. pako

pako in Sindhi 'to ripen fully as fruit'. Kannada ma:gu means the same (*DED* 3925). Phonetic changes undergone here are: nasal m of Kannada has been replaced by the plosive p in Sindhi, and voiced g of Kannada has been replaced by k in Sindhi. This is usually the other way around, i.e. the voiceless stop of Dravidian becomes voiced in Sindhi.

81. D'oD'o

D'oD'o in Sindhi 'shell of a fruit (especially of the lotus)'. Tamil toTu 'shell of a fruit, sheath of a grain' (*DED* 2922). Voiceless T of Tamil > voiced implosive D in Sindhi.

82. tumbi

tumbi or tumbo in Sindhi 'white dead covering of the pumpkin (often used by sadhus as a bowl), or white dead nettle'. Tamil tumpai 'white dead nettle' (*DED* 2738). Here, p of Tamil > b in Sindhi.

83. muTo

muTo in Sindhi 'lump'. Tamil muTai 'lump, large mass' (*DED* 4065). Here, the vowel ending ai of Tamil > o in Sindhi.

84. chor, churaN

chor, churaN in Sindhi 'to trickle down or flow'. Tamil cōr 'to trickle down as tears, blood or milk, drop, be dropped, exude, ooze out' (*DED* 2353). Here, unaspirated c of Tamil > aspirated ch in Sindhi.

85. chalaN

chal, chalaN in Sindhi 'tease, peel off, strip'. Tamil coli 'to strip off, peel off' (*DED* 2336).

86. kaTu, kapu

kaTu, kapu in Sindhi 'to bite, cut, nibble, etc.'. Tamil kaTi 'to bite, gnaw, nibble' (*DED* 945).

87. kap ki:ru

kap ki:ru in Sindhi 'slicing or cutting of vegetables'. Tamil ki:ru or ki:ri 'to slit, tear, cut, slice' (*DED* 1353).

88. kaca:i

kaca:i in Sindhi 'meanness'. Tamil kocai 'meanness' (*DED* 1695). Phonetic changes are: the vowel o of Tamil > a in Sindhi, and the vowel a of Tamil > a: in Sindhi.

89. taga:Ri, taga:Di

taga:Ri, taga:Di in Sindhi 'balance or pair of scales or iron pan usually meant for scales'. Tamil takati 'balance or pair of scales' (*DED* 2437). The changes noted here are: voiceless k of Tamil > voiced g in Sindhi, and voiceless t of Tamil > retroflex D in Sindhi.

90. cug'aNu

cug'aNu in Sindhi 'poke, pick'. Kui cugna 'to harrow, poke, pick' (*DED* 2243).

91. Tukar

Tukar in Sindhi 'pieces'. Tamil takar 'to be broken to pieces' (*DED* 2429). Semantically, the two are same. Voiceless t of Tamil > voiced, retroflex T in Sindhi, and the vowel a of Tamil > u in Sindhi.

92. kuTu

kuTu in Sindhi 'to strike with knuckles'. Tamil coTu 'to strike with knuckles, beat, hit, peck' (*DED* 2325).

93. ciTo, cuTo

ciTo, cuTo in Sindhi 'a blot'. Tamil coTu 'defect, blemish' (*DED* 2326). A metathesis has taken place.

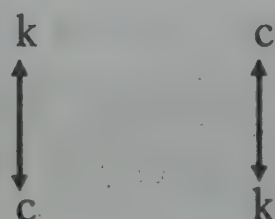


94. gha:ti

gha:ti in Sindhi 'murder'. It has been preserved in apgha:tu 'murder of one's own self'. Tamil ka:tu 'kill, murder' (*DED* 1213).

95. caku

caku in Sindhi 'to bite'. Tamil kacu 'to bite' (*DED* 920). A metathesis occurs.



96. pha:TaN

pha:TaN in Sindhi 'to burst'. Tamil poTù (poTi) 'to burst' (*DED* 3674). Unaspirated p of Tamil > aspirated ph in Sindhi, and the vowel o of Tamil > a: in Sindhi.

97. theRu

theRu in Sindhi 'stumble'. Tamil terru 'to stumble, mistake, stammer'. Malayalam terru 'to slip, stumble, mistake' (M.B. Emeneau; *Dravidian Comparative Phonology*; 1970).

98. saraku

saraku in Sindhi 'step aside'. Tamil cari 'to slip away'. Tulu saraku 'step aside' (*DED* 1950).

99. cuN

cuN in Sindhi 'pleat or fold of garment'. Tamil cuNku 'end of cloth left hanging out in dressing, pleat or fold of a garment' (*DED* 2648).

100. suThi

suThi in Sindhi 'nice, good'. It may be extended to 'intelligent' also. Tamil cuTi 'intelligent person' (*DED* 2656).

101. si:Ti:

si:Ti: in Sindhi 'whistle'. Tamil ciT 'whistle' and ciTi 'whistling' (*DED* 2638).

102. manahu

manahu in Sindhi 'dwelling, house'. Tamil maNai 'house, dwelling' (*DED* 3911). The changes - both regular and irregular - are: h has been added in Sindhi (regular), and the retroflex, nasal of Tamil N > n in Sindhi. Usually, Sindhi puts on the retroflex.

103. rambha

rambha in Sindhi 'bellowing, roaring, making a noise'. Kannada rambha has the same meaning (*DED* 4237).

104. ka:ka:

ka:ka: is the noise of the cawing of the crow. In Tamil, kakkai means crow (*DED* 1197). The Sanskrit word for crow is ka:ka.

105. Dakhan

DakhaN in Sindhi means carpenter. The Tamil word for carpenter is *tacan* (S.V. Shanmugam, p. 44). The phonetic changes taking place here are of the regular type. Voiceless *t* of Tamil > voiced, retroflex *D* in Sindhi, Tamil *n* > retroflex *N* in Sindhi, and Tamil *c* > aspirated *kh* in Sindhi.

106. TiRaNu

TiRaNu in Sindhi 'to sprout'. Tamil *tarai* 'to sprout, shoot forth' (*DED* 2545). Voiceless *t* of Tamil > voiced, retroflex *T* in Sindhi, the *r* of Tamil > retroflex *R* in Sindhi, the *n* of Tamil > retroflex *N* in Sindhi, and the *ai* ending of Tamil > to *u* in Sindhi.

107. ka:viRyal

ka:viRyal in Sindhi 'angry'. Tamil *kavaRal* 'being anxious, sorrowing' (*DEDR* 1328). Semantically, the two are quite close.

108. kala:

kala: in Sindhi refers to an art. kala:u ~ refers to arts. In Tamil, *kalai* is arts (*DED* 1090).

109. tulasi:

tulasi: in Sindhi 'sacred basil'. Tamil *TuRay* or *tulaci* means the same (*DED* 276).

110. tiru

tiru in Sindhi 'arrow'. Ka. *tiru* 'bow-string' (*DED* 2656). The semantic similarity in this case is noticeable.

111. daN

daN in Sindhi 'fine, tax'. Tamil *taNtu* 'levy of tax' (*DED* 2482). Here, the voiceless *t* of Tamil > voiced *d* in Sindhi. Later Sindhi has *DanD*.

112. susu karaN

susu karaN in Sindhi 'to urinate'. Go. *susu* 'to be just wet (of clothes drying)' (*DED* 2242).

113. su:T

su:T in Sindhi 'to suffocate'. Tamil cuTu 'to be hot, burn, warm' (*DED* 2183). It is quite possible that in Sindhi the meaning has taken a generalized connotation. Possibly, it was 'suffocate by burning'. The change of Tamil c to s in Sindhi is a recurrent feature.

114. gheTo

gheTo in Sindhi 'male of sheep or goat, he buffalo'. Tamil kaTāvu, kaTāy, kaTa mean the same (P.S. Subramaniam; *Comparative Phonology*; p. 247). Voiceless k of Tamil > voiced, aspirated gh in Sindhi.

115. kaR

kaR in Sindhi refers to a channel made for irrigation. In Tamil, ka:l va:y is irrigation channel (P.S. Subramaniam; *Comparative Phonology*; p. 67).

116. gaD'u

gaD'u in Sindhi 'to join, to tie, to build'. Tamil kaTTu 'to tie, build' (P.S. Subramaniam; *Comparative Phonology*; p. 20).

117. pa:r (pa:r kaDhaN)

pa:r kaDhaN in Sindhi 'cry in a way so as to weep for the dead'. Tamil pa:r 'to sing song of the dead' (P.S. Subramaniam; *Comparative Phonology*; p. 65).

118. pahaN

pahaN means 'stone, rock' in Sindhi. In La:Ri:, it is pronounced as paN. In Tamil, paRai is 'rock' (*DED* 3392).

VI

FINDINGS AND CONCLUSIONS

It is proved beyond doubt that Sindhi is a Proto-Dravidian language. It is not derived from Sanskrit as was believed so far. Further studies undertaken will not only prove interesting, but will lead to further intensifying the Sindhi-Dravidian links. The linguistic data is evidence of the fact that the Dravidians did inhabit the Indus Valley. The data on the two Dravidian suffixes tanDo and koT in Sindhi place-names in Sindh cannot be ascribed to mere chance. It is strong proof of the Dravidian element in Sindhi, of the Dravidian contact with Sindhi in Sindh. Possibly, the Dravidians

mutually cohabited the Valley with the Aryans; considering that the two were not divided on a racial basis but were simply two distinct linguistic groups. There has always been give and take of ideas between people and cultures. India has been multilingual. There could have been mutual give and take of ideas among the Dravidian and Aryan linguistic groups. If there is no recorded historical evidence of the Aryan invasion nor of a war of the uprooting of the Dravidians by the Aryans, it is quite possible. It is possible that the Dravidians migrated to the South of India through the sea-route, for trade or other livelihood purposes, and therefore no remains of its existence have been left on land; or further excavations along the Indian mainland are waiting to be dug up and give a clue to the separation of the Sindhis from the Dravidians. Sea-route was safe for migration from Sindh to South because of the obstacles on land like, hills, mountains, rivers, jungles and possibly hostile tribes on the way. Acceptance of the Dravidian presence in Sindh also explains Bishop Caldwell's list of Dravidian words borrowed by Sanskrit. In fact, Sindhi appears to be an important link language of the Dravidian languages to the other languages in India. Other North Indian languages too need to study the etymology further more intensely. An example that helps throw light on this matter is the Tamil term *caipai* meaning 'sleeping mat' (Subramaniam, p. 66). This got the false notion of *ca:rpai* in Sindhi and further into North India to mean 'having four legs'.

Other Affinities

Besides the linguistic affinities in Sindhi and the Dravidian languages, there have been other affinities related to the culture of the two linguistic groups. These cultural similarities are noticeable in varied fields like musical instruments, food items, ways of dressing, etc. Some of these are discussed here.

Musical Instruments

morshang (Tamil) and morchang (Sindhi)

morshang in Tamil and morchang in Sindhi refer to a musical instrument played in Tamil Nadu and also in Sindh and Kutch. This instrument is not so common in other regions of India. It is the only instrument that uses oral cavity as a resonator.

ghaTam (Tamil) and ghaRo (Sindhi)

ghaTam in Tamil and ghaRo in Sindhi refer to an inverted clay-pot used as a musical instrument. This is commonly played in Tamil as well as in Sindhi musical programmes.

Besides the morshang/morchang and the ghaTam/ghaRo, some other musical instruments common to the two cultures are the dohil (Sindhi) which is like the mridangam in Tamil, and the tuta:ri (in Tamil and Sindhi).

Different castes play different musical instruments. An in-depth study of their language, occupational vocabulary and also ethnolinguistic study (especially blood group study) may bring to light some missing links between the two cultures.

Folklore Similarities

I have observed that there are some similarities in Tamil and Sindhi folklore. This study also needs attention. About forty volumes of Sindhi literature have been published by Sindhi Adabi Board, Sindh. A project for collecting Sindhi folk literature of Kutch has been undertaken by the Gujarat Sindhi Academy. A comparative study of Sindhi and Tamil folk literature will further highlight the links between the two cultures. The ululation in lullabies is common to Sindhi and some Dravidian cultures. In Sindhi, a famous lullaby by Bhagat Kanwar Ram has helped preserve the ululation in a world of rapid changes.

Similarities in Food

Certain types of food relished in the Dravidian belt of India are also relished by the Sindhi community. A striking example of this is the lotus stem. The lotus stem is enjoyed as a delicacy by Sindhis as also by local people in Kerala. Curd rice which is a popular dish in the Dravidian belts, is actually an essential preparation among Sindhis on the occasion of thadRi (a festival to mark the change of seasons, in the month of August) besides being relished on other days as well. The special type of jaggery-rice (pongal) prepared on the occasion of Tamil new year is exactly the same type of jaggery-rice (ta:hiri:) prepared on the occasion of Sindhi new year. This is prepared among Sindhis as among Tamilians on ordinary days also. Oil put in flour, when kneading dough, is known as mohan in Kannada and as moan in Sindhi.

The Muruki

The men-folk among Sindhi oD's and Sodhas wear a ring in the ear which they refer to as the muruki:. The term is definitely etymologically related to the Dravidian term muruku which means ornament worn in the helix of the ear (*DEDR* 4979); murki is earring (*DED* 4082). Along with extensive study of the language of the Rgveda, a tonal analysis of Vedic verses (Rgveda especially) is also required.

The study of the various caste dialects of Sindhi like oD'ki:, koli:, menghwali:, soDhki:, the fisherman dialect of Sindh and Kutch (the ma:ngar and the muha:Na:s) requires immediate attention. Change is taking place fast in India. My study of Sindhi in the various parts of India like Madras, Gujarat, Madhya Pradesh and Delhi clearly shows that the words for vegetables, fruits and day-to-day life have undergone many changes. In almost all the cases, local words have replaced original Sindhi words. This is the result in a short span of fifty years. We can imagine the changes that can result from multiple contacts of thousands of years. Fortunately, though, many tribes like the menghwals, etc. in the Kutch region of India have preserved archaic forms of the language and culture due to remoteness and isolation from the main stream. The same may be true of the large number of spoken dialects in Tharu, i.e. the desert region of Sindh, Pakistan. Sindhi tribals and artisans who are the best source of the data are increasingly under great pressure from modern influences. Scholars and academic institutes need to act soon enough.

The linguistic and cultural affinities cannot be put aside as mere chance. It is equally important to establish the period of Sindhi-Dravidian separation by glottochronology. Keeping in mind archaeological evidence, studies in this area need to be intensified. History needs to be dug deeper. An integrated approach involving history, Linguistics, ethnolinguistics, sociology, archaeology among others is called for to trace the true antecedents of India as it stands today.

Appendix

1. *Hatvanka* (pronounced haTva:Nka:): "Sindhi Hindus have been using a wide range of scripts in different parts of sindh since several centuries. Pandit Kishinchand Jetley claims that these scripts are being used in Sindh over the last 5000 years. He comes to this conclusion on the basis of his study of the haTva:Nka script and the script of the seals of Moenjodaro and some other scripts of ancient Egypt etc. (Jetley, pp. 4-8). G.A. Allana in his book *Sindhi Suratkhati* claims that haTva:Nka: scripts are based on Devnagiri scripts and were used for keeping business records, land records, etc. In the absence of old records it is difficult to say anything definitely about the period of origin and the wider uses of the script. However, after the British conquest of Sindh, Captain Stack in his *Grammar of Sindhi Language* published in 1845, opines that in Sindh many haTva:Nka: scripts were used for Sindhi language. All these are originated from Sanskrit and are written from left to right" (Gidwani, pp. 118-119).
2. *Harijan*: This term refers to the backward classes or the 'outcastes' who were and are still to a large extent not included in the mainstream of social

life. Some of these are the Menghwals, Kolis, Bhils and the Vaadhas, found in Kutch even today. These classes worked with dead carcass, bones, ate dead animals' meat and were kept out of 'society'.

3. 'Non-immigrant' indicates the opposite of migrant Sindhi speakers who were forced by the Partition of India in 1947 to leave their roots in Sindh and migrate to other parts in India. 'Non-immigrant', here, thus refers to those Sindhi speakers who were before Partition and are still residents of the Kutch region of India.
4. Referring to the excavation site of the Indus Valley Civilization, I have used the term Mooan-jo-daro for what is termed in various other ways like, Mohan-jo-daro, Mohen-jo-daro etc., as I humbly feel that Mooan-jo-daro is closest to the actual meaning of the term in Sindhi, i.e. tomb-of-dead. When quoting others, I have retained the spelling as written by them.
5. Sindhi oD's migrated from Sindh to India after the Partition of India in 1947. Until 1947, they were virtually nomads, but since 1971 about 20,000 oD's settled near Bhatti mines, about 16 km. from the Qutb Minar in Delhi near the border of Haryana state. Apart from these, about 10,000 oD's are settled in various colonies of Delhi and New Delhi in jhuggies (ghettoes). They all specialize in earth digging work. According to Enthoven, "oD's, Vaddars, or Beldars numbering 94,096 (1901) including 48,090 males and 46,096 females are found all over the Presidency including Sindh. The bulk of the tribe being residents of Karnatak. The name of the tribe is also spelt odde, wodde, waddar, vadir and orh, and appears to be in some way connected with oddesh or Orissa Their occupation being working in earth and stone. The term oD' or vadda is commonly said to be derived from the Kanarese. Odd is 'to join' from the occupation of joining stones in building" (Enthoven, p. 138). "Sindhi oD's claim Kshatriya origin and have six exogamous sections all of which are common among Rajputs. They are Bhatti, Parmar, Solanki, Chavan, Rathod, Tumour" (Enthoven, p. 148).

The present oD's also claim to be Rajputs but Sindhi Hindus consider them as Harijans or outcastes. Sindhi oD's are of very dark complexion. Their living standards are very low. They live in thatched huts without modern facilities of water, electricity and lavatory blocks. Their children study in the nearby Hindi medium schools run by Delhi Municipal Corporation. Hence, the entire younger generation is cut off from reading and writing Sindhi. All of them speak oD'iki as their first language and Hindi as their second language. The younger generation understands standard Sindhi but very few of them can 'speak Sindhi. They have a very rich oral literature. They sing oD'iki songs but now Hindi

songs have become more popular with them. They have two sets of numerals - one which they use when speaking to standard Sindhi speakers and another which they use amongst themselves while dealing with or rather bargaining with standard Sindhi speakers or with other language speakers in Delhi, Rajasthan, Punjab, Haryana, etc.

The data on oD's was collected during my fieldwork in October 1989. In all humility, I must say that I was the first to find out oD'iki speakers in India. Before this, no Sindhi knew about them. Among his papers of the data collected from the oD's is a Sindhi song sung by little oD children which is scribbled as if to keep pace with the singing. Very humbly, P.J. Gidwani mentions at the bottom of the page that a tape-recorder which would have made his work much easier was not available in those days.

6. Many facets of the Mooan-jo-daro and Harappan Civilizations can be seen even today in Kutch, Gujarat and Kathiawar. The Lothal and Dhora-vira excavations add archaeological evidence. Banni is the large cattle-grazing region of Kutch, where the ancient Sindhi castes of Jat, Sodha, Soomra, Sama, Menghwar, Koli, Bhil and Mutwa among others can be found even today. These castes have preserved ancient Sindhi culture close to their hearts even today. Banni the rural region of Kutch is the living reflection of the rural scene of Sindh to the community of Sindhi Hindus in India. The inhabitants of Banni follow old Sindhi customs, like holding kachehari, i.e. 'a gathering of the men of the village in a courtyard, in which they exchange news, views and opinions amidst general talk', play Sindhi musical instruments, especially the 'borindo' which is an instrument also found in the Mooan-jo-daro excavations, ham Sindhi folk songs when grazing cattle and speak Sindhi language as well. They have preserved traditional Sindhi folk songs and dance close to breath.

In the 1980-s, I took up the linguistic study of the inhabitants of Kutch, along with the study of their folklore, social customs et al. I pointed out to Sindhis in India and to Sindhis across the borders in Sindh, Pakistan the fact that the folk of Banni have preserved in essence, all the archaic customs and linguistic forms of Sindh. Even amidst harsh climatic conditions that Kutch has always been prone to - earthquakes, droughts, cyclones - Sindhis in Banni have kept the Sindhi language alive. They also use in their daily lives words and phrases that have become extinct in Sindhi as spoken in many other places; they use terms that can be traced to ancient Sindhi literature and terms that are extinct from Sindhi school or college textbooks of today; their language stands testimony to the richness and copiousness of the Sindhi language. Banni is the pilgrimage of Sindhi.

Studies in Sindhi in India have not taken into consideration the language, social life or art of the Jats, Sodha, Soomra, Sama, Menghwar, Koli, Bhil, Mutwa, Thepa, Manghanhar, Mirasi, etc. Sindhi literature of India has no character from any of these castes; Sindhi literature, in fact, gives the idea that all Sindhis are urban. The rural castes remain tragically outside the mainstream of educated, urban Sindhis (Gidwani, 1999).

Jadejas: They are settled in Kutch and Saurashtra. Speakers of one of the important dialects of Sindhi, Kutchi, they trace their lineage to the rulers of Kutch and Rajkot. The study of their speech shows that they have retained the most archaic forms of Sindhi.

The term *DED* refers to *Dravidian Etymological Dictionary* and *DEDR* refers to *Dravidian Etymological Dictionary Revised*. The number given in relation to Dravidian terms refers to the entry number and not the page number.

G.A. Allana's Chart of Sindhi-Dravidian Relationship

Saindhva / Saindhvi

Saindhvi

Proto-Dravidian

Dravidian

Saindhvi

Lahndvi

Tamil Telugu Kanar

Malay

Sindhi

Lanhdi

Siraiki Hindko Multani

Derejati

(and many others)

Allana, p. 305)

Note: Malay here is Malayalam; Kanar refers to Kannada.]

The "my" in the above pages refers to that of Parso J. Gidwani. Therefore, "my opinion", "my study", et al refers to his opinion, his study, et al.

ACKNOWLEDGEMENTS

The data in this paper are "faint coincidences in the lowest and most general elements of speech" of Old Sindhi and Old Tamil. It offers testimony to the hard work, sincerity, dedication, insight and love for Sindhi

that were the essence of my father's persona. A humble researcher to the core, this data is thirty years of his stupendous work in the field of Linguistics. In the true line of significant scholars of Sindhi, he too could not see his work in the form of a book worth acclaim far and wide. My father, Dr. Parso J. Gidwani, has joined the line of some earlier scholars of Sindhi. Captain George Stack, who compiled the English-Sindhi and Sindhi-English dictionaries - important works that laid the firm foundation of bilingual lexicons in the Sindhi language - could not see his work in print in his lifetime. The dictionaries were published after his death. The pioneering step in the direction of etymological dictionaries was made by Father Shit. He compiled *Akhar-Dhatu* in 1866. Unfortunately, the work remains unpublished. My father has left behind him this important work in the field of Linguistics and an *Etymological Dictionary of Sindhi*, the data of about a crore entries of which lies with the Deccan College, Pune, unpublished, besides many valuable ideas, notes and data on many different aspects of Sindhi language and culture, the reservoir of information that lay within him, which have gone with him beyond retrieval.

I have only put together the data, the notes and his ideas in the form of an article. The outline for the introduction was written by him and I have tried to follow it. I had to leave out the sections on Morphology and Syntax, which I think were to be on the basis of comparison of Sindhi and Dravidian languages, as I did not deem myself fit for this. At every step of putting his handwritten data together, I have missed him and marvelled at his genius, especially when it came to examples of metathesis provided here. Often when I was not sure of something, my first impulse was "O I can ask Daddy" followed each time by the painful awareness that this was not to be. Yet, I must state that many a time when I was absolutely lost, I found some clue or even lines underlined thoughtfully by him in pages zeroxed that showed me the way.

Something I must mention about Daddy's work in this connection and similar ideas being worked upon in Sindh (Pakistan) is that Daddy worked independently in collecting proof for his thoughts, as it was neither possible nor easy to reach out to scholars in Sindh. I would like to quote my father from his lecture *Similarities in Sindhi and Dravidian Languages*, delivered at the Sindhi Academy Delhi in 1996. "This present lecture is based on data (independently collected by me), but I am quite aware of the views of Dr. N.B. Baloch, Mr. Sinaj, Trumpp and Dr. G.A. Allana. Dr. Allana's contribution is great as he is the first linguist who collected data and tried to prove that Sindhi is a proto-Dravidian language. He published *Sindhia jo bunya:d* ('Origin of Sindhi') in 1973, and subsequently in 1978, the same was translated in English and published in *Sindhological studies*. I regret I have no access to both the works The data presented here is independently worked out by me".

I can actually trace the evolution of my father's ideas from Sindhi as an Indo-Aryan language to Sindhi as a Proto-Dravidian language through his comments interspersed with his notes on whatever research he was doing. In his earlier studies, he appeared quite comfortable with the idea of Sindhi as an Indo-Aryan language. With further intense research, he appeared to have started noticing the Dravidian element which could not be ignored. In his last lecture, in October 2004, exactly two months before his sudden demise, he stated, "After my research of Sindhi language having substratum layer of Dravidian languages, I feel proud to belong to the illustrious Dravidian culture. I am proud that my ancestors belonged to the great Dravidian culture".

Mention must be made here of the fact that somewhere in his notes, my father has made a point stating "similarities in the Moon-jo-daro script and Hatva:nka:" (see appendix). What these similarities are, which pages he wished to include in this paper, only he could explain. In such places, I have felt totally handicapped.

The comparative vocabulary given here is from Old Tamil and Old Sindhi. Aeons of time have passed from the time these terms as mentioned in this book were used and terms now, both in Tamil and in Sindhi. Despite this, similarities have remained to show the strong connection that transcends time and boundaries. And to see these could only be the insight of a genius!

A drop cannot take the credit of making the ocean. Just so, I cannot take any credit in finalising this paper. Without the help, encouragement and support of so many around me, this endeavour would not have been possible. First of all, I humbly wish to thank all the scholars - to me unknown - who had healthy discussions with my father on this matter.

Three guardian angels - angels because I have not seen them as yet but who have guided and blessed me throughout - I am forever indebted to. One of these angels is Dr. V.I. Subramoniam, the renowned scholar unparalleled in the field of Linguistics. My sincere heart feels overwhelmed with gratitude to him. Another angel whose counselling and guidance went a long way in giving me the confidence to pursue the task is Dr. T. Ramachandran of Tanjavur. I thank him for his benign letters full of encouraging blessings. I also thank him for giving my father a patient listening and encouraging him.

The other angel I owe a lot to is Dr Michel Boivin of the Sorbonne University, Paris, who happens to be my father's younger brother (I guess they both have strong roots in the Indus Valley). My humble thanks to him for he has answered all my questions patiently, has taken the pains to read every word carefully and shared my concerns for the book.

This centre declares its mission as to give access to the breath-taking developments of Information Technology in Indian languages to the common people of India. This centre released the first Malayalam word-processor software in 1991 which worked in MS DOS. In 1994 *Thoolika* was released which is a window based processor. Subsequently three versions of *Thoolika* were released and the recent one being *Thoolika* 2006. *Thoolika* 2005 is an Indian language Keyboard driver software and Font pack. Malayalam, Hindi, Tamil text can be typed and used in MS Windows platform, such as MS Office, Adobe PageMaker, PhotoShop, CorelDraw etc. This added a new dimension in regional language word-processing, data-processing, e-mail, web-publishing and in Desk Top Publishing. *Thoolika*2006 for Unicode is in Unicode format which gives both traditional and Reformed Malayalam scripts. The changing of script from Traditional to Reformed and vice-versa can be achieved simply by selecting the font name. With this Unicode keyboard driver software and OpenType Unicode fonts we can input Unicode standard Malayalam text in any Unicode compatible software like MS Word-XP, Access-XP, Excel-XP, Outlook etc. on MS Windows. *Thoolika*2006 has both Government of Kerala approved Inscript Keyboard layout and Malayalam Typewriter Keyboard layout (Remington) driver software for inputting Unicode standard Malayalam text. It can input all the *chill-aksharams* with a single keystroke. Alphabetical sorting of Malayalam is 99% accurate in Unicode text, as declared by the developers.

Global Writer is the word-processor that lets you write in 100 languages with one keyboard, and *Global Office* is the enhancement to Microsoft Office that adds text entry and visual keyboard display in over 100 different languages - together they provide a complete multilingual suite. *PDSTEXT* a Unicode web authoring tool for Indic languages is available in beta version for Tamil, Telugu, Malayalam, Kannada, and Hindi along with English.

Unicode

The Unicode standard is the universal character-encoding standard used for representation of text for computer processing. It is fully compatible with the International Standard ISO/IEC 10646-1; 1993 and contains all the same characters and encoding points as ISO/IEC 10646. Unicode provides a consistent way of encoding multilingual plain text and has made it possible to transfer and exchange text files internationally.

Unicode was developed by Unicode Consortium, U.S.A. for incorporating a uniform encoding system for all the world languages. 65000

spaces were allotted for accommodating all world languages. 128 spaces, the numbers from 2944 to 3071 were allotted for Tamil Language. This was done after consulting the concerned language organizations and for Indian Languages C-DAC was consulted. Unicode is an ideal solution to the problems of multi-platform internationalisation. It is destined to replace ASCII and other single and multi-byte character sets currently in existence. Majority of the software developers of the world over have declared conformance to Unicode. They include IBM, Microsoft, Oracle, Sybase, Unisys, Apple, Bell Labs, Compaq, GNU/Linux, Sun, SCO, Hewlett Packard, Netscape, Ericsson and Novell. More and more applications are becoming Unicode compliant. It is expected that Unicode will become the de-facto standard in the multilingual word, especially with the spread of Internet. More details can be had from the website <http://www.unicode.org>.

Script Converter

Several scripts processors are available for Tamil and the Tamils are using one or the other scripts in their computers. So the document prepared with one particular font may not work in some other computer which does not possess that particular font. As a result the users find it very difficult to transfer the data from one computer to another. In some cases the fonts with hard key lock will not work in another computer which does not have that key. So the transferability of text is a real problem in Tamil Computing. Now one script converter called *Pongu Tamil* is available in net to facilitate conversion of fonts to Unicode. In this software there are two windows. The text to be converted will have to be pasted in one window. After pasting the text if we click the option button the text will appear in the second window in Unicode format.

ISM Import is a utility developed by C-DAC that converts data from other font formats into ISFOC format.

Electronic Online Dictionaries

Digital dictionaries of South Asia is a web site which digitalized the available dictionaries in the web. The South Asia Language and Area Center at University of Chicago, Columbia University and the Triangle South Asia Consortium in North Carolina are creating and disseminating these electronic dictionaries. For each of the twenty-six modern literary languages of South Asia, key dictionaries were identified by a panel of language experts, and also at least one multilingual dictionary for each language. For the more frequently taught languages, a monolingual

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C.J. Roy (Tr.), 1999, HB, Demy 1/8, pp. xxviii+332, Rs. 400/- (US\$ 40/-)

The original work is a classic in Malayalam grammatical literature. In the late 19th and early 20th centuries, there were no compeers to A.R. in any of the South Indian languages. A.R. had an analytical mind. Though well-versed in Paniniyam, he did not follow it blindly. Wherever Paniniyam was not found applicable, he took an independent course of analysis.

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THE DEVELOPMENT OF PRE MALAYALAM *ai

V.I. SUBRAMONIAM

[1] The development of *ai in the history of Malayalam has remained a disputed area among its historians.¹ Some assumed a proto-phoneme *ai from which they derived the reflexes *a* and *e*. A few have argued that the proto-phoneme *a has developed a reflex *ai* in the initial syllable. A sizable number including a few comparativists have posited *ay as the proto-phoneme from which they have derived all reflexes. Our effort will be to plot the distribution of *ai* and its reflexes synchronically, making use of the spoken and written variety of Malayalam and to trace its development diachronically. In a separate article, it will be compared with evidences drawn from the Dravidian languages, chiefly from the South.

[2] The indigenous Malayalam words in which *ai* and its reflexes occur fall into six sets.

Set I In which the first syllable contains *ai*: *tai* 'seedling', *kai* 'hand', *aiyappān* 'God Aiyappa'.

Set II *mala* 'mountain', *tala* 'head', *vala* 'net', *pāḷa* 'coconut flower shoot', *kāḷa* 'ox', *vāḷa* 'a fish type', *vāṭa* 'bad smell', *kōṭa* 'summer', *pāra* 'stark', *māla* 'garland', *pāta* 'path', *vīlcca* 'the act of falling', *tālcca* 'low area', *nērcca* 'offering', *aṭaykkuka* 'the act of closing'.

Set III [a] *malaye* 'mountain [Acc.]', *malayāl* 'because of the mountain' [Inst.]?, *malayōṭu* 'with the mountain [Soc.]', *malayil* 'on the mountain [Loc.]', *malayute* 'of the mountain [Gen.]', *taṭayuka* 'the act of preventing'.

[b] *malaykku* 'to the mountain [Dat.]', *kāḷaykku* 'to the ox [Dat.]', *aṭaykkuka* 'the act of closing [of S. 7]'.

Set IV *malagaḷ* 'mountains', *paraṭavagaḷ* 'birds', *kāḷagaḷ* 'oxen', *niravu* 'fullness'.

1. K. Retnamma supplied a few forms and discussed with me the schema presented in this paper. A.R. Gopala Pillai gave the forms found in *Līlātilakam*. To both research scholars of the Department of Linguistics I am grateful.

Set V *malaye* / *malagale* 'mountain[s] [Acc.]', *tiraye* 'the tide [Acc.]',
karaye 'the bank [Acc.]'.

[3] The distribution of *ai* and its reflexes in the aforesaid five sets can be tabulated as follows:

Table I					
Syllables					
Initial	Medial			Final	
<i>Cai</i>	<i>ay + V</i>	<i>ay + CC</i>	<i>a + C</i>	<i>-a</i>	<i>-e</i>
<i>tai</i>	<i>malayute</i>	<i>kālaykku</i>	<i>malagal</i>	<i>mala</i>	<i>malaye</i>
[Set I]	[Set III [a]]	[Set III [b]]	[Set IV]	[Set II]	[Set V]

[4] *ai* occurs in the first syllable [Set I]: *-ay-* before vowels and double consonants [Set III [a] and [b]] and *-a-* before single consonant [Set IV] in the medial syllables: only in the final syllable *-a* [Set II] and *-e* [Set V] occur in contrast. For instance, in analogous environments both contrast: *āna* 'elephant', *māne* 'deer [Acc.]'. Either the environment in both should be differentiated or the *-a* of Set II and *-e* of Set V should not be derived from the same base **ai*. When the *-a* ending forms take a vowel-beginning suffix, they have an alternant *-ay*. So also, when they take a stop + stop-beginning suffix, they have an alternant *ay*. For instance, *mala* / *malayil* / *malaykku* 'mountain [Loc.], [Dat.]'. It will be economical to assume **ai* as the base for *-ay* and *-a*. For *-e* also, the assumption of *ai* as the base form is confirmed by the availability of early spelling as *-ai* for *e*. A second explanation is also possible. As indicated earlier, the *-a* endings can take a suffix whereas the *-e* ending can take none other than the emphatic marker, which occurs after all word-closing suffixes. Also, all case markers in Dravidian close words. Thus, the environment for *-e* is word-closing which is indicated with [+]. The environment for *-a* will be word-closing or non-closing which is indicated with [±]. Now the distribution is complementary: *ay* or *a* occurring before non-word closing juncture [±], *-e* occurring before word-closing juncture [+].

[5] A third alternative will be to treat *e* as one which occurs only in the Accusative marker-slot and elsewhere it is *a* or *ay*. In other words, the conditioning factor now is the morphemic slot and not the environment. A similar thinking is popular with the transformationalists.

[6] The case suffixes occur after an empty marker *-in*, which occurs in all oblique stems which do not end in *-m* or *-n*. In the former, it is optional everywhere, except before genitive *-Re*. In the latter, it does not occur. *marattine* / *marattee* 'tree [Acc.]', *vīttine* / *vīttē* 'house [Acc.]', *manṇine* / *manṇe* 'mud [Obj.]'. The change of *ai* to *e* after *-n* or *-m*, the two word-ending nasals which are fronter than the other nasals can be considered as the conditioning factor. For the forms like *ate* 'that [Obj.]', one can have the base form *atine* which is also attested. Now the distribution of *e* will be after front nasals. The contrast between *āna* 'elephant' and *māne* 'deer [Acc.]' is nullified by deriving the latter from **mānine*, i.e. after *n*, the front nasal.

[7] In Set III [b], for *kālaykku* 'ox [Dat.]', a free variant form is attested in speech and writing as *kālakku*. The southern dialect of Malayalam has the pronunciation *kālaykku* though sometimes written as *kālakku*. In the northern districts, the written form is *kālaykku* but pronounced as *kālakku*. Where there is a contrast, the free variation is absent. As in *maraykkuku* 'the act of hiding', *marakkuka* 'the act of forgetting'. Also, in *aṭaykkuka* 'the act of closing' as against *aṭakkuka* 'the act of peeling'.

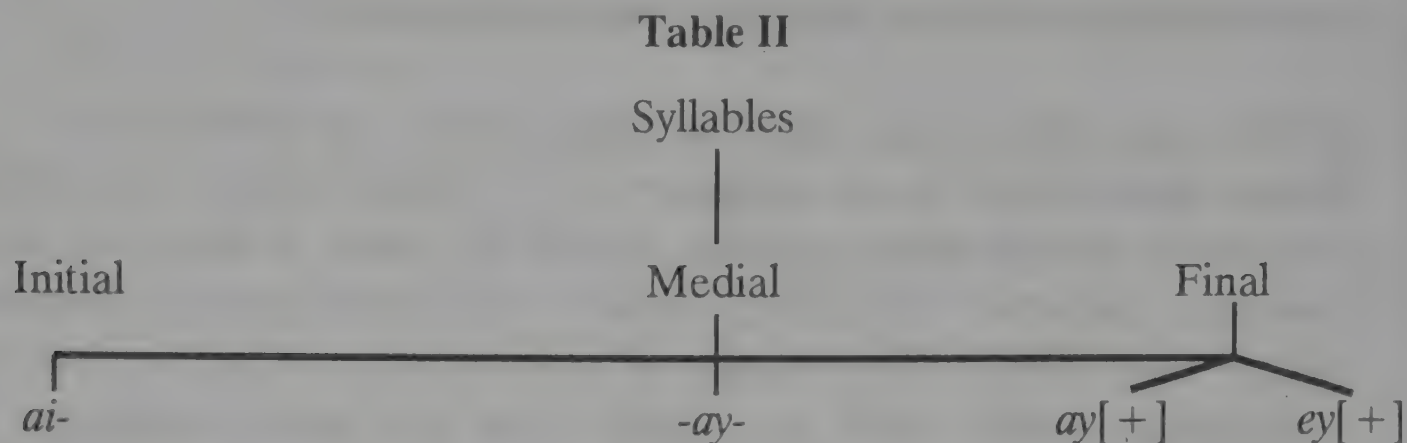
[8] In Set IV, before a consonant, only *-a-* occurs as in *tiragal* 'tides', *niravu* 'fullness', *kuravu* 'blemish'. Before vowels, these alternate with *ay* as in *tirayāl* 'because of the tide', *vīṇayāl* 'because of the lute'. Through internal reconstruction, the *-ay* form can be recovered which alternates with *-a* before consonants.

[9] Before palatal consonants also, *-ay* becomes *-a*, as in *pulaycci* > *pulacci* 'Pulaya woman [Caste name]', *parayññu* > *paraññu* 'said' (*parayum* 'will say').

[10] In a set of words, after long vowels the *y* in the word-final position becomes zero as in *vāy* / *vā* 'mouth', *pēy* / *pē* 'ghost', *kāy* / *kā* 'unripe fruit'. Being so, the *-e* occurring before the word-closing juncture [+] can be derived from *ey* (Cf. also S. 14).

To sum up, *ai* occurs in the first syllable, *ay* in the medial and final syllables before non-word-closing juncture [±]. **ey* occurs in the final

syllable before the word-closing juncture [+]. Table II will summarise the above statements and simplify Table I.

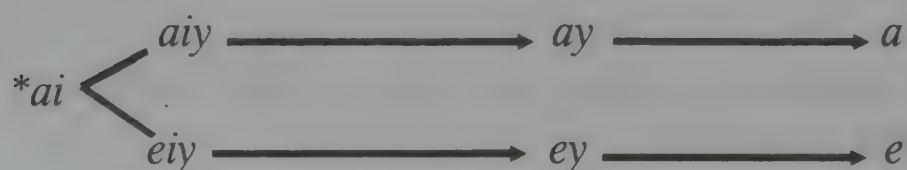


[11] In the final position, -ay has split into -ay and -ey. Free variations are attested before palatal consonants for *a* and *e* in stems. For instance, *vaccu* / *veccu* 'placed', *taccu* / *teccu* 'tailored', *kayam* / *keyam* 'forest-tank', *dayvam* / *deyvam* 'God'.

[12] Also, we have noted that *ay* before a palatal consonant becomes *a* as in **pulaycci* > **pulacci* 'Pulaya woman [Caste name]', *mulaycci* > *mulacci* 'one who has breasts' (Cf. S. 9). In the examples cited above, *ai* before palatal consonants becomes *ay*, the front vowel *i* > *y* becoming a zero. This helps to make a credible inference that the *ai* has developed secondarily a palatal off glide -y as **aiy* leading to the disappearance of *i* before the palatal to become *ay*. This palatal glide again has disappeared before palatal consonants to become *a* as in *ay* [C a[C. The derivation proposed is as follows:

**ai* ————— **aiy* ————— *ay* ————— *a/C*

The retention of *y* before vowels is as *ay*. *y* is now explainable as due to an off glide. Many intervocalic glides are of this type. The occurrence of *ai* in the initial syllable and the graphemic representation in old texts everywhere as *ai* [and not as *ay*] will help to posit *ai* as the pre-form which changes to *aiy* and *ey*. Diagrammatically, the reflexes of *ai* will be:



[13] The last set which is six in number has a series of forms which deserve close scrutiny.

This consists of lexical items, indicating place, time, direction, distribution etc., which can be broadly described as 'locale'.

- Set VI [a] *nāle* 'tomorrow', *nālatte* 'of tomorrow [Obj.]', *tāle* 'below', *pirage* 'behind', *munne* 'before', *innale* 'yesterday', *etire* 'opposite', *potuve* 'commonly'. In this subset, the addition of the locative case marker *-il* will be redundant and in a few cases not possible.
- [b] *varāte* 'without coming', *pōkāte*, 'without going', *unṇāte* 'without eating'. In this subset, the positive forms are *vannu* 'having come', *pōyi* 'having gone', *unṭu* 'having eaten' in which *e* is an alternant of *-u* and \emptyset .
- [c] *vaḷare* 'in abundance', *kūṭe* 'increasingly', *vara* 'to come', *pōka* 'to go'. In this set, the duplicated forms for emphasis have *-a* as in *vaḷaravaḷare*, *kūṭakkūṭe*, *varavare*, *pōkappōke*. The *e* is an alternant of *a* which is a gerund marker.
- [d] In the subset, *pōle* 'similarly', *verute* 'for nothing', *atile* 'in that', *kaṇakkine* 'in exact measurement', the final vowel *e* appears to be the enunciative one.

In subset VI [a, c], the *e* alternates with *a*. In subset VI [b], it alternates with *u* and \emptyset (after *i*). In subsets [a] and [b], it is an enunciative vowel like *u*. There is no evidence to state whether the *e* is a replacement or derived from *ai*.

[14] One compelling argument in favour of reconstructing **ay* for **ai* is the occurrence of *y* after long vowels and *i* after short vowels. The *Līlātilakam* examples *kūvi* > *kūy* 'having called', *tāvi* > *tāy* 'having jumped', *pilantā* > *pilantāy* **pilantanai* 'you [Sing.] split' will illustrate the alternation of *-y* for *-i* after long vowels. Whether the *-y* is an allophone of *-i* or an independent semivowel *-y* has not been stated by grammarians. If it is a transcriptional mode for *-i* after long vowels, then *-y* is another allograph or allophone of *-i*. In that case, a graphemic overlap with the semivowel *-y* will cause difficulty. Also, three-vowel clusters like *āi* (written as *āy*), *ūi* (written as *ūy*) have to be posited for pre-Malayalam if the above interpretation is accepted. Since after long vowels, *i* is replaced by *y*, the semivowel, that fact can be profitably used for interpreting **ai* as VC, i.e. **ay* because the longer form is *āy*. By interpreting **ai* as *ay*, a few irregularities will result. Most important of all is on the rule of vowel change operative in Malayalam and Tamil. This change is available in other members of the Dravidian family

also. A change of the type in the Canonical Sets CVCV > CVC as in **nama* > *nām* 'we [Pl.] Inclusive' and -CVCV > *-CVC > -CV as in *rājāvu* > **rājāv* > *rājā* 'the Raja' is quite regular. The word *tāy* can be derived from *tāyi* > **tāiy* > **tāi* > *tāy*. So also, *kūyi* > **kūiy* > **kūi* > *kūy*. If *ai* is treated as *ay*, the regularity in vowel change will be affected. A new rule like the one that follows will be needed: **kūy* > **kūyu* > **kūy*. This, in addition, will introduce a consonant cluster *Vy* in the pre-stage. Furthermore, requirements in metre and the *alapetai* (extra long) forms cannot be satisfactorily met or explained if **ay* instead of **ai* is posited.

A gain in one part creates problems in another part. We just wanted to place before the researchers the alternate possibility without taking sides.

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A LINGUIST VISITS BANGLADESH

Sanghamitra Saha, 2001, PB, Demy 1/8, pp. iv + 96, Rs. 75/- (US\$ 5/-)

A most interesting travelogue of a linguist whose parents came from Bangladesh and several relatives still live there. It reads like a detective novel.

Notes & Discussions

**INTERDEPENDENCE OF MORPHOLOGY AND
SYNTAX IN SENTENCE TRANSFORMATIONS**

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Sentences in (almost all) languages have the following simple structure [1-3]: ('< >' (n) '()'), where () indicates the sentence or verb phrase boundaries, < > indicates the non-verb boundaries, ' ' indicates that the elements within it are optional and n (suffix) indicates the number of such elements possible in a sentence. Normally $n = 0$ to 6 or 7.

In what follows, the terms virtual nouns, virtual adjectives and virtual adverbs are used here to refer to the traditional noun, adjectival (or relative) and adverbial clauses or phrases.

1. Transformation of a sentence into a 'virtual noun'

A sentence like 'I am a teacher' could be transformed into the following types of virtual nouns: 'I, who am a teacher' or 'My being a teacher' depending upon: (1) whether the whole sentence is transformed into a virtual noun with the subject complement including the link verb converted into a virtual adjective, or (2) whether the subject complement together with the link verb is transformed into a virtual noun and the subject itself is converted into a virtual adjective, or (3) whether, as in Tamil, the whole sentence is converted into a virtual noun.

(1.1) The structure of the original sentence is:

(< I > (am) < a teacher >)

where the parentheses () indicate the verb or sentence boundaries and the angular brackets < > indicate the non-verb boundaries. If the above sentence has to be converted into a noun, it has to be brought into the non-verb boundaries < >:

< (< I > (am) > a teacher >) >

In this form, it is a virtual noun at the metalanguage level and can serve to form a sentence like:

‘"I am a teacher" is a grammatically correct English sentence.’

But it is not a grammatically correct virtual noun at the ordinary level of use in the language. For it to be a correct virtual noun, it must have a headword and a qualifier. If we have chosen < I > as the headword, we must have the remaining part of the sentence as a qualifier to it. So < I > goes outside the sentence bracket and the remaining part to be a qualifier of < I > should also go into a non-verb bracket and the sentence bracket within it remains as there is a verb in it.

< < I > < ((am) < a teacher >) > >

Now, ‘am’ is a finite form of the verb ‘to be’ and it is not an imperative form either. ‘Am a teacher’ cannot exist as a grammatically correct unit in English unless the verb ‘am’ is converted into a participial adjective or is supplied with a dummy subject that relates to the headword like an adjective.

The participle ‘being’ in English can only be a gerundial noun or an adverbial participle, it does not seem to function as a participial adjective. The only alternative left then is to supply a dummy subject in place of the original subject. The relative pronoun ‘who’ is the one that does the job:

< < I > < (< who > (am) < a teacher >) > >

which will serve as the subject of any sentence, like, say, ‘I, who am a teacher, like my job.’ Since ‘being’ cannot be an adjective, it could just be omitted and what remains could serve as a qualifier to the headword, known traditionally as a noun in apposition:

< < I > < (< a teacher >) > >

and as there is no verb inside this structure, the parentheses also vanish and the two superfluous angular brackets merge into one:

< < I > < a teacher > > to give ‘I, a teacher, like my job.’

(1.2) When the predicate is converted into a virtual noun and the subject is changed into a virtual adjective:

As before, the whole sentence is changed into a non-verb and put into the angular brackets < >. To convert this whole structure into a virtual noun, just insert the conjunction or marker 'that' before the parentheses and get:

< That (< I > (am) < a teacher >) >

This is a traditional noun clause and it can be the subject or object in a sentence with some other verb.

< That (....) > is well known.

Who said < that (....) > ?

If the predicate alone is nominalized and the subject is converted into an adjective, the verb in the predicate is changed into a present participle or gerund and then the subject, if a pronoun, is replaced by the corresponding possessive adjective:

< < My > < (being < a teacher >) >

'My being a teacher is of great advantage to my own children.'

2. Transformation of a Sentence into a virtual adjective or relative clause or phrase

The sentence 'I am a teacher' can be converted into an adjective or relative clause by substituting a relative pronoun in place of the subject. Since it then becomes an adjective, i.e. a non-verb, it goes into the angular brackets < >:

< (< who > (am) < a teacher >) >

This will qualify the headword < I >.

3. Transformation of a Sentence into a virtual adverb

Here again we put the sentence in the non-verb angular brackets. The predicate can be converted into an adverb by replacing the verb by its adverbial participle form. It then becomes a separate individual unit and the subject too is an individual unit that will go into a sentence: 'I, being a teacher, found it necessary to correct hundreds of answer papers.'

The original sentence could be transformed into various types of virtual adverbs by inserting before the parentheses various subordinating conjunctions or markers:

‘When I am a teacher’

‘If I am a teacher’ (‘am’ can be changed to ‘were’ if the condition presupposes an improbable state)

‘Because I am a teacher’

‘Although I am a teacher’.

The above structures are: <when (...)>, <if (...)>, <because (...)> and <although (...)>.

Adverbial phrases could also be formed by placing a simple or compound preposition before the noun phrase:

< In < <my> <((being) <a teacher>) > > >....

< In spite of < <my> <((being) <a teacher>) > > >....

and, in extreme desperation, God forbid:

(< To hell > <with < <my> <((being) <a teacher>) > > >)!

which is a verb-less sentence in which the preposition ‘with’ goes with the whole noun phrase ‘my being a teacher’.

A comparison with Sanskrit shows:

(< *aham* > < *adhhyaapakahh* >), a verb-less sentence, or

(< *aham* > < *adhhyaapako* > (‘*smi*’)), a sentence with the overt presence of the link verb *asmi*.^{**}

Since Sanskrit has a relative (clause) construction, the above sentence could be transformed keeping *aham* ‘I’ as the headword, and converting the remaining part into a relative clause, giving rise to:

< < *aham* > < (< *yahh* > < *adhhyaapakahh* >) > > or

< < *aham* > < (< *yahh* > < *adhhyaapako* > (‘*smi*’) > >

When the participial adjective *san* is used, the participle is usually placed before the headword:

< < (< *adhhyaapako* > (*san*)) > < *aham* > >

Omitting the link verb:

^{**} Note: Sanskrit and Tamil are written here in Roman Braahmik orthography [4], that deviates from a pure transliteration.

< < *adhhyapako* > < 'ham' > >

A Dravidian language like Tamil** does not have a relative clause construction (although one could be artificially created) and so it always uses the participial adjective or nominal adjective constructions. Thus, the sentence:

(< *naan* > < *aasziriyān* >) or

(< *naan* > < *aasziriyān aaga* > (*irukirren*))

keeping *naan* as the headword, is nominalized as:

< < *aasziriyān aana* > < *naan* > >

by converting *aasziriyān* into an adjective with the addition of the particle *aana* or:

< < (< *aasziriyān aaga* > (*irukirr*)) *a* > < *naan* > >

by converting *aasziriyān* into an adverb with the particle *aaga* and by converting the verb into a participial adjective. The adjectival construction precedes the headword. It is to be noted that those languages that use prepositions tend to place the qualifying phrases after the headword and those that use postpositions tend to place them before the headword. German, Russian and Sanskrit are notable exceptions.

Cf. German *Der auf dem Berg stehende Mann* side by side with *Der Mann, der auf dem Berg steht* in which *Mann* is the headword.

Note also that in English, 'The on the hill standing man' is not a permissible construction, unless some writer begins to write such constructions and makes them popular. Such deviant-construction-writing writers are rare in English.

The discussion in this article has been restricted to the link verb 'to be' in the present tense, but the steps shown in making the transformations clearly show the interactive nature of morphology and syntax.

Transformations cannot be brought about in syntax alone without a corresponding change in the morphological elements. This takes place in a regular pattern, though it depends upon the morphological provisions available in each language. The morphological provisions available in different languages so far as the participles are concerned are indicated in the following table.

0. Participles	0. Past		0. Present		0. Future	
0. Voice 1. Language	0. Active	0. Passive	0. Active	0. Passive	0. Active	0.
0. English	0. PN, PA	0. PD	0. PN, PA, PD	0.	0.	0.
0. German	0. PN, PA, PD	0. PN, PA, PD	0. PN, PA, PD	0.	0.	0.
0. Russian	0. PN, PA, PD	0. PN, PA, PD	0. PN, PA, PD	0. PN, PA, PD	0.	0.
0. Sanskrit	0. PN, PA, PD	0. PN, PA, PD	0. PN, PA, PD	0. PN, PA, PD	0. PN, PA, PD	0.
0. Tamil	0. PN, PA, PD	0.	0. PN, PA, PD	0.	0. PN, PA, PD	0.

[PN = Participial Noun, PA = Participial Adjective, PD = Participial Adverb]

The above tabulation is a tentative one. A revised table may provide a more accurate picture. But it gives an idea as to what languages can effectively take the help of morphology in their syntactic transformations of sentences into virtual nouns, adjectives and adverbs.

The above includes participles that are morphologically derived as well as those that are used as other types of participles by mere extension of function rather than by derivation.

In Sanskrit, all kinds of participles listed are morphologically derived forms. English at the opposite extreme has many morphologically derived adverbial participles serving as participial nouns (gerunds) and adjectives. Just one example would suffice. 'going' is a present adverbial participle but in 'school-going children' it is forced into the role of an adjective and it has an extended use as a noun in 'the going is good'.

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Notes & Discussions

ON THE INDETERMINACY OF CONTEXT¹

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Abstract

This paper examines in detail Derrida's views on the indeterminacy of context in the wake of his privileging of writing as the mode of language that affirms its own ontology. Even if the voice implied in speech originates from a speaking subject, we cannot assume that she is the all and only source of the language that she speaks. Even a spoken discourse is always and already a text that is made up of many indeterminable intertexts and much like a written text, it remains open to potentially infinite contexts of interpretation, which are undecidable and over which the speaker / writer has no control. Derrida, thus, inverts the relationship that is usually assumed between language and literature. For him, 'language' is a product of literature, than is the case the other way round. Accordingly, language is shorn of all its naturalness, and is viewed as a text. And moreover, this theoretical move unhinges the linguistic signifier from all its connections with a source, destination, signified / referent, or 'context' and submits the text to the incessant play of signifiers. However, we know from Derrida's philosophical writings that his attempt is not to declare a general principle of textual uncertainty, but to affirm and demonstrate the fact and the infinite possibility of the displacement and dispersal of hegemonic texts and their supposedly stable significations. Derrida's discussion of the speech act of 'promise' - simultaneously ethical and aesthetic - an act of the self to welcome the other, is also highlighted in this paper.

Talking about 'context' from the point of view of Pragmatics, it is useful to distinguish between three kinds of context. The first is the spatio-temporal context of the production of a text, or the context that 'surrounds' the speaking or writing subject (or for that matter, the listening or the reading subject) in 'real' space, and time. This is more like the 'physical' context. The second is the 'linguistic' context that immediately

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precedes or follows a given text. (Anaphora, metonymy, etc., belong to this category.) This kind of context may also be called the co-text. The third type of context is the 'discursive' context, and this consists in all the presuppositions, conventions that are or can be associated with a given text. In the absence of a better term, we may also call it the 'cultural' context.

These three types of context are certainly not unrelated. For instance, given the necessity of a spatially or temporally contiguous structure of linguistic articulation, whether spoken or written, the co-text cannot be dissociated from the spatio-temporal context. We can see that there are limits to how much the elements of a text can appear discontinuously in the temporal or spatial dimensions, i.e. in the case of a spoken text when it unfolds in time, or in the case of writing, when letters and words are spatially arranged. And similarly, cultural aspects may specify how co-texts are ordered in relation to a given text and how they are to be interpreted in their mutual interrelationship. In this context, taking an extreme view, which of course we will not be able to pursue here, it is possible to say that no syntactic ordering is entirely free from the effects of a cultural context. But more importantly, and taking a rather integrated perspective, we may say that the emergence of a text, whether in its formal or interpretative aspect, can be seen to be correlated with the unfolding of the cultural or the discursive context within a spatio-temporal context.

Thus, though we have begun by speaking of three different types of context, and these as distinct from the text itself, it may be more appropriate to do away with the strict and the very opposition between text and context, as Jacques Derrida has tended to do. It is not difficult to note that our contemporary academic perspective on language, which is also the dominant perspective in Linguistics, still hinges heavily on, to use an excessively hyphenated expression, a naturalist-historicist-formalist-positivist approach to language, as per which language consists of some naturally occurring and growing essential forms. According to this perspective, languages, or texts that make up a language, are out there in the world, like plants and trees, and are surrounded by contexts which are also naturally present in the world, in all their innocence. We, as analysts in such a context (and do we not take ourselves to be the context, for all the naturally occurring texts and contexts which exist out there irrespective of us?) would be required to analyze and understand the clearly determinable correlation between the given texts and their (again given) contexts. Thus our main task here and now, in other words, in the context of this seminar on its second day, would be to produce a text that tries to relate to the endless circle or chain of texts and contexts that appear before us and are dispersed and disseminated in the act of delivering this text itself. That is to

say, even while trying to grasp the notion of context, or trying to come to grips with it, we shall be, in a decidedly determined way, coming to terms with the indeterminacy of a context that remains terminally ungraspable.

From a deconstructive point of view then, no language, no text, no signification, no interpretation and perhaps even no experience, exist in a purely natural state. Anything that is shared between two or more individuals such as consciousness (since consciousness can never be individual; it can exist only when there is a sharing of meaning or knowledge; if one person alone was conscious it would not be recognized as consciousness), language, or meaning, or alternatively anything upon which a conscious individual has acted cannot remain in a state of nature. Thus, even the bare voice, when it is given for mutual repetition and recognition between two conscious human beings, becomes part of a differential system of signs. It is in the sharing of these differential signs that they become (part of) a cultural system. Similarly, we can say that any object towards which two individuals have similar or shared intentions acquires a cultural value.

Texts are, of course, infinitely more complex manifestations of language than the sharing of bare voice. Commonly articulated linguistic elements are subjected to multiple levels of differentiation, classification and hierarchization as part of the formation of a language that is more or less systematized. And moreover different individuals who relate themselves to the same objects or linguistic elements (let us say, 'words') do not 'share' these objects and words in an equal and uniform way. Just as a so-called community does not consist of a natural unity of its supposedly 'common' members, individuals do not and perhaps are not able to relate to every object and every word that pertains to a 'community' in exactly the same way. Not only the texts produced by different individuals are likely to be different, but the way in which individuals relate to the same text, that is, how they interpret them, would also be different. We can say that instead of words or texts maintaining a state of pure signification with respect to their referents in a context that is supposed to be natural and neutral, they (these words and texts) exist forever in a state of cultural instability, owing to the fact that the persons who produce them or understand them are differently related to them.

Traditionally, at least in what is called 'western metaphysics,' philosophers have treated the problem quite differently. Here, words are assumed to have their fixed significations, common for all users of a given language, and when a person speaks she is supposed to 'communicate' freely and in a relatively unhindered way, her emotions, thoughts or intentions to her interlocutor/s. Words, as per this view, shorn of all their

historicity and materiality, are nothing but 'a transparent medium of communication. The difficulty with this view is that its proponents fail to see that words are not a biological extension of our body, that is, neither of our brain nor of our tongue. Since the words we use are the result of repetition and sharing by unequal interlocutors, or interlocutors become unequal, they carry traces of all the non-natural processes of differentiation, classification and hierarchization that are constitutively present in any given language. In other words, words rather than being mere signs of things in the world can be seen as signs of how we have organized and are continuously organizing our cultural world.

This is what makes it possible for Derrida to argue, even if he does not say it precisely in these words that any and every use of language is a text that stands as a relief against a definite politico-cultural background. Every instance of language use thus, rather than vanishing into an abyss of obscurity can be said to have a visibility comparable to that of writing. This is what prompts Derrida to propose writing as the legitimate and ineliminable mode of all language, rather than speech, which was traditionally taken to be the unquestionable heir of an imperious thought.

Language, even before it can be a publicly available medium of 'truth,' has been privately (and culturally) worked upon by its users, and social and political relations have been formed and maintained on the basis of it. Social and cultural hegemonies have been forged in and through language. Rather than tell the facts about the world, texts tell us what human beings are, in general or particular, and how they have set up their cultural, institutional and discursive lives. Texts that are in place in any given context as well as our understanding of the contexts in relation to any given texts, emerge as the result of a series of elaborate conventions, or if we wish codifications, which are indeed not evident when words or texts are seen as that which passes fleetingly between interlocutors, and as a medium of 'communication'. Derrida's insistence on viewing all language as writing is based on the fact that all occurrence of language can be 'displayed' like writing and in that display, the 'play of signifiers' that characterize language as a signifying system, can be registered and observed. However, it would be wrong to construe this grammatological aspect as a mere 'scientific' fact. Every use of language can also be the displacement or dissemination of the given texts or the reconfiguration of the signifiers of the language of a given community, identifiable as such or not. And, on the basis of the theoretical consideration that the process of conventionally constituting (and deconstituting) language, in both its formal and interpretative dimensions, begins from the very inception of human culture itself, and can be expected to go on infinitely, Derrida is able to assert: "there is no outside of the text."

The scenario can be described better as follows. A text or a fragment of it acquires relative stability by repetitive use within (the context of) a community. We can say that that text has a conventional use and its meaning is relatively fixed. This 'convention,' of course, would mask all the hegemonic relations that exist within a community, and multiple ways in which different members of the community relate themselves to the text. The text may have a 'constative' or 'performative' function in the sense of speech theorists like Austin and Searle. That is to say, from the point of view of these theorists, texts are used either to describe a state of affairs in the world ('It is raining'), or to perform certain actions that have a consequence in the social world ('I hereby declare Manmohan Singh the Prime Minister of India'). According to the speech act theory, depending on the appropriate contexts (such as the 'truth' or the 'felicity' conditions respectively for the constatives and the performatives), these texts will convey the intentions of the language user to her interlocutors. Derrida's argument in this context is twofold: 1. the texts themselves do not carry anything from their outside, for example, neither a corresponding fixed signification nor the intention of the language user; 2. the chain of contexts that can be really or potentially associated with the texts can never be completely exhausted. In their endless repetitive movement, more or less guided by conventions, which are themselves never conclusive, words and texts can have alternative significations varying from situation to situation, and from language-user to language-user. And moreover, the contexts in which the same text can be used in times to come can never be predicted.

The important point to note in this context is that a language-user is neither the absolute source nor the final destination of a text that is produced in any given situation. My text comes to me mediated by an indefinite series of previous texts, and previous uses of the same language, or of other languages, and my interlocutor may relate the text I am producing to many other texts that are accessible to her indefinitely. My text and the text that my interlocutor creates for herself by interpreting my text are both intertexts, and they can be sources for further texts which are also intertexts, and so on and so forth. It can be expected that modifications and alterations take place all along the way, and at every node in the so-called 'communicative chain' in such a way that no signification or intention exists as original or is finalized in a 'communication'.

The traditional picture of the words or texts conveying a certain corresponding reality and the individuals using them to communicate certain meanings, intentions and truths is clearly a static one. Words and texts in fact make the world, bring about our lived world and if you want, also break it. They also simultaneously constitute us subjects on the one

hand, and desubjectivize us on the other, in relation to a given world. Repetition of words and texts and their meaning as they are given to us maintains a given state of the world. The property of iterability of words is what accounts for the very possibility of language. In the absence of this iterability, there can only be Babelian confusion in the world, where each individual speaks his or her own individual language. At the same time it is impossible for individuals to use the same words or texts in the same way all the time, or for a large number of individuals to use their words or texts in a uniform way. This is where we can observe the dynamic aspect of language use in social contexts. Incessantly, the different users of a given language introduce within it alternative words, texts, interpretations, and even alternative syntaxes. These deconstructions or innovations may be regarded as purely internal transformation of a language, or as transgressive movements towards the outside of it.

These alterations or modifications of language or texts in which they manifest involve, according to Derrida an 'undecidable contamination'. Texts do not remain in an eternal state of purity with regard to either the significations that they are said to contain, or the intentions or the 'uptake' of the language users. Artistic uses of language, as in literature or theatre, which the speech act theorists consider as instances of 'parasitic' use of language, are for Derrida, contrarily the registers where such a contamination are clearly evident. The iterability of the words and texts of language, rather than assuring their passage through channels dictated by convention, in fact makes it possible for them to be used in unpredictable ways, even beyond any predictable conventionality or institutionality of the particular artistic mode itself. Of course, it goes without saying that the literary / artistic mode of language is exempt from the necessity of producing 'constative' speech acts. That is, conventionally literary texts are not required to refer to the state of affairs in the world. Nor do they have a conventional 'performative' function that pertains to the 'real' world outside of literature. In literature and art, through non-conventional statements, which may or not be constative with respect to the artistic/literary linguistic acts are made, and these may have a performative value with respect to the texts and the language in which the those statements are articulated. Such constatives may perform the act of convening new texts and new contexts, i.e., new relationships between the language users and the given texts and languages. And if we take Derrida's point of view that all language is writing or like writing, the unpredictable and unconventional contamination of texts through intertextual innovations or deconstructions can always blur the distinction envisaged by the speech act theorists between the constatives and performatives, and can always be performative acts of reconfiguring and reinterpreting the texts of a given language, or the language itself. In

other words, every act of language can be construed as resulting in a text or language other than the given, i.e. an alternative language.

This singular use of language, evident in the work of poets and other creative writers, in other words this idiomaticity, is what Derrida calls 'signature'. The use of this term is clear in his reference to the German Jewish poet, Paul Celan: "What I have tried to think is an idiom (and idiom means clearly an individual property, what is one's own) and a signature within the idiom of language, which is seen at the same time as the experience of the inappropriability of language. I believe that Celan has attempted a mark, a unique signature which was a counter-signature of the German language and at the same time something that happens (arrive) to the German language...".² In a domain that is essentially inappropriable, that is language, the poet has made a mark, has tendered his signature, indicating his rather tenuous ownership of a transition, a transformation, a transgression that he has effected in the language that he is writing. Signature, is writing at the extremity of one's language, an extreme form of writing, a trace that a writer leaves in his own language, indicating nothing but the site of an inappropriable property, which is also the site where a language has become the other of itself. Derrida seems to have thought of a similar relationship between him and the French language in which he wrote almost all his life. In an interview with the *Le Monde* a few weeks before his death in October last year, Derrida had said:

To leave some traces in the history of the French language, that is what interests me. I live with this passion, if not for France, at least for something that is embodied in the French language for centuries.³

(At this point, I would like to dedicate this paper to the memory of Jacques Derrida.)

As a French-speaking Jewish immigrant from a small town in Algeria, Derrida always chose to position himself outside, or in the margins of metropolitan French discourse. Nevertheless, going by the enormous volume of his writings, we should reckon that he had a great passion for the French language, the only language he really loved. But this was not the love of a master-builder seeking some immaculate construction in his native or host language, but that of an outsider, a marginal, seeking to examine and deconstruct its core, its major discourses, with the apparent innocence and

2. Derrida, Jacques, 2001. "La langue n'appartient pas". Interview with Jacques Derrida realized by Evelyne Grossman. **Europe** « Paul Celan », Jan.-Fev., 861-862, 2001, p. 83.

3. J. Derrida, in interview with Jean Birnbaum, **Le Monde**, 19 August 2004. Text translated by the present author.

charm of a novice, and yet with the aim of carrying this language forward into unknown, unchartered and undecidable territories.

This nomadism of language, and in language, this tendency to transform texts and contexts simultaneously in sweeping discursive movements along the arid deserts of modern civilisations is the hallmark of those philosophers who are referred to as post-structuralist / post-modern. Deleuze, Foucault, Lyotard and Derrida are the well-known representatives of this trend. Let us try and see how we can perceive this movement from the perspective of philosophers who might look more traditional in comparison, for example Wittgenstein and Heidegger. While emphasizing the heterogeneity of language uses, in the early part of his *Philosophical Investigations*, Wittgenstein had compared language to an ancient city. "Our language can be seen as an ancient city: a maze of little streets and squares, of old and new houses, and of houses with additions from various periods; and this surrounded by a multitude of new burroughs with straight regular streets and uniform houses."⁴ Heidegger had argued in a similar vein, but in a completely different context and for entirely different purposes, that 'language is the house of being'. Later on elsewhere in the same work we just referred to Wittgenstein had also suggested that "language is a labyrinth of paths. You approach from one side and know your way about; you approach the same place from another side and no longer know your way about." (§ 203, p. 82) What the poststructuralists say about language, it seems to me, is closer to Wittgenstein's metaphor of the labyrinth: in our creative engagement with language, in our writing, our discourses and our texts leave behind our towers, and our huts, our secure shelters and our fiercely guarded dwellings, our valued contexts, and undertake nomadic journeys along labyrinthine and never-ending paths, with no clear sense of having departed, and no sense of having to arrive, but always making sense of what is outside of us, of our alternatives, and being otherwise than what they are, and infinitely so.

This language, again from Derrida's point of view, is a language that retreats from and overcome its own given contexts, and continuously creates its own contexts. This language is not a given a language, it is a language forever to come. It is a language to come, the language of *avenir*, a promised language, a language that can only be promised, a language that is promised to the other. In this sense, promise itself becomes the main act of language, an act of language that does nothing but promise another language.

4. Wittgenstein, L., *Philosophical Investigations*, § 18, p. 85.

Notes & Discussions

**CITATIONS FROM RĀMACARITAM IN
GUNDERT'S DICTIONARY: ITS DEPENDABILITY**

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Dr. Hermann Gundert (1814-1893) has extensively made use of Rāmacaritam for the compilation of his 'Malayālabhāṣā Vyākaraṇam' (1868) and 'A Malayalam English Dictionary' (1872). In the preface of the Dictionary, Gundert stated: 'This history commences for us (if we except a few inscriptions on copper and stone) with Rāmacaritam in which we probably have the oldest Malayalam poem still in existence composed as it was before the introduction of the Sanskrit alphabet and deserving of the particular attention of the scholar, as it exhibits the earliest phase of language, perhaps centuries before the arrival of Portuguese. For several antiquated words such as *alika*, *aRam*, *aṅki*, this poem is the only authority. Even though Gundert was very careful in segmenting the compounds and identifying the grammatical category of the lexical items taken from Rāmacaritam, some mistakes occurred. It is doubtful whether Gundert was acquainted with Vaṭṭeluttu script in which the manuscripts of Rāmacaritam (hereafter RC) were copied in olden days. There is chance to believe that he utilised the help of native scholars for reading old manuscripts and explaining contextual meanings. This might be the reason for misreadings and incorrect segmentations found in the entries related to RC. In certain cases Gundert could not differentiate Sanskrit *tadbhavas* and *tatsamas*. Factual error is also seen in etymological derivations.

Gundert considered Malayalam and Tamil as dialects of the same member of the Dravidian family. This is why so many Tamil words occur still in Malayalam local usage, phrases and formulas. He also opined that it is difficult to draw the line of demarcation between Malayalam and Tamil words. So he mainly depended on Tamil works for explaining the ancient Malayalam words collected from earliest texts like Rāmacaritam and Kṛṣṇagātha. Keeping in mind the Tamil forms, he selected lexical items

from ancient Malayalam works. In some context, this leads to incorrect readings and segmentation, for instance: ameyti, ikutta, ōluka, cōku, nakekka, etc.

This paper is an attempt to locate and describe such items worthy of note.

Data collected for this paper is from:

1. Index of Rāmacaritam, second part of the Ph.D. dissertation *Grammar of Rāmacaritam* by P. Gopalakrishnan Nair, Department of Linguistics, University of Kerala, 1979 (unpublished).
2. *Rāmacaritam: Critical edition with grammar and index*, Ph.D. dissertation by M.M. Purushothaman Nair, Department of Malayalam, University of Kerala, 1978 (unpublished).
3. *A Malayalam English Dictionary*, Hermann Gundert, second edition, 1962 SPCS, Kottayam.
4. *A Dravidian Etymological Dictionary*, T. Burrow & M.B. Emeneau, Oxford University Press, 1984.

Note: The numbers noted against RC, first number refers to the paṭalam (chapter or division) where the lexical item exists. Second refers to pāṭṭu (song) and third to the line. Thus 113-3-7 has to be read as 113th paṭalam 3rd song 7th line. Lines quoted from RC in Gundert's Dictionary also can be identified by numbers noted against them. In most cases Gundert gives the first number only and very few have second number also.

1. amaiti: what is included. 'ilaṅka māṇakar amaiti okkavar muḷakki' RC 107. The correct reading is - ilaṅka māṇakaram eyti okkavar muḷakki. The lexical item is eyti not amaiti. eyti = 'having reached'. 'A Dravidian Etymological Dictionary' (DEDR) 161 does not record amaiti as a Malayalam Lexical item.
2. amekka: 'to subject, join'. 'mūveliyotāmō tarmātēyum amekka is the line quoted from RC. The correct reading of the line is 'mūvaliyotāmō tarmāte upamakku'. The lexical item is upamakku not amekka. DEDR 161 followed Gundert and recorded amekka as a lexical item of Malayalam.

3. ikutta: 'conquering'. Gundert illustrated the meaning by quoting 'ikutta dāsarathi' RC. The correct reading is *mikutta* tācarati. The lexical form is *mikutta* not *ikutta*. DEDR 415 follows Gundert and includes *ikukk*, *ikaykkuka* - 'to conquer' - as Malayalam forms.
4. iṇṭal/iṇṭar: 'vexation, sorrow'. Gundert quotes the following lines to illustrate the meaning - iṇṭal perutāyirivarum RC 15, 'iṇṭar ceṇkina nayanannal RC 19. In the second line quoted here the lexical item is not iṇṭal or iṇṭar. The correct reading of the line is 'virantu tiṇṭēr ceṇkina nayanannalōṭu'. Gundert segmented the lexical compound as virantut + iṇṭar instead of virantu + tiṇ + tēr means 'quickly drove the strong chariot', tiṇ = 'strong', iṇṭal = 'sorrow' is not seen in DEDR.
5. ōluka: 'to flow'. ōlum cōri (RC). pōntolukum cōri is the correct reading. Lexical item is *olukum*, not ōlum as it is found in Gundert's Dictionary. DEDR 1010 recorded ōluka without any change.
6. cōku: 'demon'. 'aṭuttu pūṭta cōkin kūṭṭam' (RC) is the line quoted for illustration. 'aṭutta pōt acōkin kūṭṭam' is the correct reading. The lexical item is *acōku* - 'ashoka plant' - not cōku. DEDR 2870 records the word cōku among Malayalam words. Ever since cōku has no attestation in Malayalam.
7. timiruka: 'pron ? sure of success ?'. Quoted line is 'tiramirum arikula vīrar (RC). The correct reading of this line is tiramurum arikula vīrar (RC). tiramurum is a combination of tiram + urum = 'skilful'. Lexical item is *tiram* not timiruka. DEDR 3223 lists timiru as a Tamil word.
8. nakekka: 'to laugh'. Three lines were quoted from RC to explain the meaning. Among them 'nakayaluṭe kōlavum' is a wrong reading of 'cāṭina kayaluṭe kōlavum'. Gundert segmented cāṭina kayaluṭe as cāṭi + nakayaluṭe and took nakakka as the lexical item. DEDR 3569 is naku, Malayalam nakekka: 'to laugh'.
9. nāntuka : nanayuka = 'to become wet'. 'nāntuniken nān (RC 51-4) is the line quoted. The correct reading of this line is nām tuniken nān. Gundert took it as nāntunik + en nān instead of nām + tunik + en nān means 'let us attempt'. DEDR 3630 listed nāntuka as Malayalam lexical item and gives the meaning 'to become wet'. In RC this word is not attested.
10. ikku: 'mishap'. 'ikkuvillavennu' (RC) means 'said, there was no trouble' ikku in the line cited is a tadbhava of Sanskrit word ikṣu 'sugarcane'.

ikkuvillavan means 'he who has sugarcane as bow'. Actually Dravidian word *ikku* is not a lexical item in RC. However DEDR 524 lists *ikku* also as a lexical item of Malayalam.

11. *allu*: 'darkness, night'. 'mūnnallavannu' (RC). It can be segmented as *mūnnu* + *alla* + *avannu*. *allu* has no relevance in the context. Instead of 'alla' means 'without' Gundert read it as 'allu'.
12. Under the lexical item *taṭiyuka*, Gundert gives the meaning 'to tear' and 'cut off' and doubts the original word as *tarikka* (?). DEDR 3140 lists *tarikka*. *taṭintanar aracar tumpam* is the line quoted from RC in Gundert's dictionary. Correct reading of this line is *kaṭintanar aracar tumpam*. The lexical item is *kaṭiyuka* not 'taṭiyuka'. *kaṭiyuka*: 'to renounce'.
13. *uḷayuka*: 'to suffer, a dragging pain'. To explain this meaning Gundert quoted a line from RC-*vāla enniva uḷayappōyō*. The correct reading is *vāla ennituvellām uḷayoppāyotiṇ tuṭayoṭu*. From the compound *uḷayoppāyo* Gundert took *uḷaya*. The segmentation of this compound reveals the non-existence of *uḷaya* in the context. *uḷat oppu* + *āyo* = *uḷayoppāyo*. *uḷa* = which has, *oppu* = conformity, *āyo* = is it be? Here the lexical item is not *uḷayuka*. DEDR 2702 lists *uḷayuka* as a Tamil word.
14. *īṭāruka*: 'to be solid, strong, fine'. *īṭārpaṭakkōppu* is the line cited from RC. *nīṭār paṭakkōppu* is the correct reading in the context. *nīṭu* + *ār* = *nīṭār* - *nīṭu* = 'lofty', *ār* = 'richly exist which'. The compound *īṭāruka* is an incorrect reading. DEDR 442 deals *iṭu*.
15. *cētu* = *sētu* 'dam'. *cētār kaṭalvaṇṇan* RC *cēṇār kaṭal vaṇṇan* is the correct reading. Lexical item is *cēṇ* = 'beauty'. *cēṇ* occurs in DED 2807, but the meaning 'beauty' is not recorded.
16. *corukuka* : *curukkuka* = 'to be stupefied'. From RC *curukinōru tuyaroṭu* is quoted 'curukinōru tuyaroṭu is the correct reading. So the lexical item in question is *curukinōru* 'to shrink', not *corukuka* or *curukuka* (DEDR 2853).
17. *taṭavar* = 'the enemies'. 'iṭeyiṭe taṭavar' RC. Here 'taṭavar' is a conjugated noun having the meaning 'they who will obstruct'. The meaning given by Gundert is not correct. DEDR 3025 lists 'taṭavar' with the meaning 'to stroke', 'to rub', etc. and treats it as a Tamil word.

18. *taḷam*, *Tadbhavam* *daḷam* = 'a leaf, an army'. 'attaḷattitu *kūrinan* mannavan' RC. *taḷarntitu* *kūrinan* mannavan is the correct reading. The lexical item is *taḷar* not *taḷam*. *taḷar* = 'to faint'.
19. (Tam) *tikaḷuka*: 'to shine'. 'tikaḷvīran irāvaṇi' RC 'ikaḷvīran irāvaṇi' is the correct reading (66.9.2). Gundert read it as 'tikaḷ vīran' instead of 'ikaḷ vīran'. *ikaḷ* = 'battle'. *tikaḷ* is not attested in the context. DEDR 3200 lists *tikaḷ*.
20. *tithi*: 'a lunar day'. 'nallatiti mainṭan' RC (96.8.3). Gundert read it as *nalla* + *titi* + *mainṭan*. The word *titi* has no relevance in the context. The reading required is *nalla* + *atiti* + *mainṭan*. *atiti* is a personal name of a lady, worshipped as the mother of *Dēvas*. 'atiti mainṭan' mentioned in RC is Lord sun.
21. *tukil*: 'cloth, dress'. Though the meaning is correct, it has no relevance in the line quoted from RC. 'pārttolintatu *entukilō*' is the citation from RC. Gundert took 'tukil' from the compound '*entukilō*'. Here Gundert treated the compound as *en* + *tukil* + *ō*. *entu* + *kil* = *entukil* means 'why' is the segmentation required. *entukil* is a conditional verbal participle. *ō* = an expletive.
22. Though '*tūrkkā*': 'to fill up' is current in the northern dialect of Malayalam, the line cited by Gundert to explain this lexical item is not acceptable. *vaḷar mē tūrkkunnu enna vaḷar koṇṭal* (RC) is an incorrect reading of '*vaḷar, mērukkunnena vaḷarntu punal koṇṭelunna koṇṭal*' (131-6-1). *vaḷar* + *mērukkunnu* + *ena* is the correct segmentation of the lexical item in question. Instead of *mērukkunnu* meaning 'mēru mountain', Gundert took it as *mē* + *tūrkkunnu* which is totally irrelevant in the context from which the lexical item is cited.
23. *toḷikka:tuḷekka* ? 'to pierce, serve ?'. Here Gundert doubts whether *tuḷekka* is the correct form. The line quoted from RC: '*śaramāri mārviṭattil ērru kūṭatolitta pōtu*'. The correct readings of the second part of this line is '*ērru kūṭolitta pōtu*' and the segmentation of it is *ērru* + *kūṭa* + *olitta* + *pōtu*'. The lexical item is *olitta* not *toḷikka* or *tuḷekka*. *olitta*: 'concealed which', *pōtu*: 'time'.
24. *toḷi aM** 'destruction'. The meaning is not correct much, mire, filth are the meanings. 'Varavoru *toḷi kīḷar tōḷ* (RC 92-6.2) is the line quoted. The exact reading of this line is '*vara porutoḷi kīḷar tōḷum*'. *vara* + *poruṭu* + *oḷi* + *kīḷar*. The lexical item is *oḷi* not *toḷi*. *oḷi* = 'to shrine'. *vara* = 'mountain'.

* aM denotes 'ancient Malayalam' as seen in Gundert's Dictionary.

25. naḷam: 'A reed, lotus'. This word is not seen in RC. Gundert cited the following line from RC: ellōlam naḷamiṭara vannumārenpatum (47-3.3). The correct reading is ellōlam illaviṭamennumārenpatum.
26. paccaṭi aM. 'fresh lotus, feet? or comparison?'. Gundert was doubtful of this lexical item. However he took this word from 'nāviliccayōṭu vaccaṭiyinakkamala tār' RC (1-2-6). 'vaccaṭi' is a compound of vaccu + aṭi. vaccu = 'having put', aṭi = 'feet'. paccaṭi in colloquial Malayalam means 'vegetable curry'. This meaning has no congruence in the line quoted from RC.
27. vēri: tadbhava of bhēri: 'a large drum'. 'vērikōrum moliyāl'. RC. Gundert took 'vēri' as the tadbhava of Sanskrit 'bhēri'. 'vēri' is a Dravidian word meaning 'honey'. 'vēri' occurring in the line quoted also means 'honey'. DEDR missed this word.

"For several antiquated words", says Gundert, "Rāmacaritam is the only authority". But Gundert could not fully use RC in this regard. The under-mentioned words used in RC are not seen in Gundert's dictionary. Some of them are available in DEDR.

anāṇnu	'affliction'	(113.3.7) DED112
aṇpu	'to join'	(11-5.2)
appāl	'afterwards'	(19-9-4) DED.1
ārakali	'ocean'	(164.8.2)
il ari	'young'	(162.10.4)
uray	'to stay'	(129-1-2)
elil	'strength'	(9-3-4) DEDR 848
kōvu	'foot trinket'	(146.3.4)
cirappu	'superiority'	(123.11.4)
tikiri	'a disk-like weapon'	(115-7-3) DEDR 3201
turāl	'grief'	(39-5-7) DEDR 3346. Meaning given is 'rubbish of dry leaves'
pūyal	'blow, battle'	(17.3.2)
maṭivu	'death'	(139-9-7) DEDR 4653. This word is seen in Gundert's dictionary with the meaning 'laziness'
mul ari	'lotus'	(157-1-1) DEDR 4997
vira	'fragrance'	(117-6-4)
veppu	'mountain'	(16.7.2)
vēy	'to surround'	(125-11-3) DEDR 5532

Review

ASOMIYA: HANDPICKED FICTIONS. Selected by the North-East Writers' Forum Katha. 2003. New Delhi.

Reviewed by

JENNIFER M. BAYER

C.I.I.L., Mysore

This is an anthology of stories created by writers from Assam, the land where the confluence of cultures seep deep, in a worldview, like, the powerful river Brahmaputra, which winds its way through thick forests and where humanity throngs its river bed. A neat mix of nature with traditions!

The 'Introduction' to the volume, says in simple terms, what is so apparent of the northeast. The seven sisters are held together and geographically tied to the rest of India as if it were through a loop knot, a sphere of life and space, where perceptions are of the 'unknown', because history and topography, of the region, physicality of people - their dress and cuisine are 'different', incomprehensible to the 'other' people who traverse their sphere of life and find their worldview 'diverse' and 'dissimilar'.

Stories in this collection weave a web, so fine-tuned, the reader flows through a stream of consciousness, which allures to appreciate its uniqueness, multi-ethnicity and aloofness. The maze is so woven that each unique little region is enmeshed showcasing its cultural wealth, in spite of, being located in the midst of high mountains, impenetrable forests and raging wealth.

In "The Invitation", Arupa Patangia Kalita tells the saga of a woman in turmoil with changing times. (Translated by Arunabha Bhuyan)

In "Munni's Legs", Atulananda Goswami paints a picture of how a happy train journey turns bitter and tortuous as a result of a bomb blast. In the mayhem new acquaintances, made on the train, remember the affable

and lovable Munni, even though in deep pain. (Translated by Atulananda Goswami and D.N. Bezboruah)

Translated by D.N. Bezboruah, Bhabendranath Saikia's reflections through "The Cavern" voice the white man's assumption very realistically. "Many people with black skin had been born in that country and died one day merely because they had happened to be born. They hadn't done anything beyond being born and dying, and they hadn't done anything now either. Therefore, no one had a better right to the country than the highly civilized immigrant race that had taken the land up from the deep caverns of darkness to hold it aloft in the brilliant light of civilization and prosperity through untiring industry and sacrifice. God had not made a mistake in creating a class of people with glistening white skin. His verdict lay hidden in the different in skin colour. The dark skinned idiots, incapable of realizing this verdict, sinned in the name of rebellion, but it remained the sacred duty of people like Mr. Piener to show unstinted respect to this pronouncement." (p. 39)

Unstinted respect indeed!

Mr. Piener had a heart transplant, a heart from the coloured man! The wife of the man whose heart was living in the white man's, requests him to allow her to listen the heartbeat of her husband. This turns out to be a torment for Piener. Would the colour of his face, his body, gradually turn black? Because of the organ that circulates his blood? These thoughts torture the protagonist in this story. The end is touching.

"Sirala and Sinduin" by Birendra Kumar Bhattacharya, translated by Srutimala Duara, is a tale of conflict and pain of true love between individuals from two conflicting cultures. One was from the hills and a tribal, the other, a social reformer from the plains. Love in the midst of conflict hardly blossoms!

"Guilt" by Harikrishna Deka, translated by Mitra Phukan, is about Durgeswari, the chief protagonist in the story who in her old age is called to stand witness to a death on the rail track. By coincidence she is witness to a murder that is similar to the way she murdered her husband. The torment in her heart is such that she amazes the police when she blurts out. "Yes, yes, I killed him! I killed him!"

"Looking for Ismael Sheikh" by Homrn Borgohain, translated by Pradipta Borgohain, is the narrative of two women, in the centre of history,

in Purbo Bangla, one of them in search of the man and the other running away from the man in their lives, the latter from her father, now a rikshawala, previously a Brahmin and a Sanskrit scholar. The former, an administrator, in search of the man whose life she devastated. In the context of similarities in predicaments experienced by the two women, the story ends with a changed form of their perseverance. Is it worthwhile fighting against the tides of behaviour?

"Bride" by Indira Goswami, translated by Liza Das, is about a would-be bride, which is a reflection of distressing moments traditional Indian brides face, before they are selected by the bridegroom's family. And finally the tumultuous end of a dream that comes true.

"Defeat" by Joytidev Goswami, translated by Mitra Phukan, is about platonic love between two married individuals. Society, however, dismisses it as unrealistic and impossible. Two families, completely shattered, break their bonds of marriage.

"Missing" is Krishna Bunyan's way of telling a story of an orphan boy, who runs away from the clutches of an exploitative and cruel rich man, into the arms of a poor clerk who is kind and loving. But fate has it that the boy discovers the plight of the clerk. He temporarily helps the clerk out of a momentary situation, to be once again confronted with torture and pain from the same rich man that he decides to take an extreme step which torments and persecutes the clerk's state of mind. This is translated by Meenaxi Barkotoki.

A romance in college, turned sour, the pangs of separation, and in the twilight of their lives, they realize, the reason, for one abruptly leaving, at a time when they both decided to dedicate their lives for a village.

Kulla Saikia's "The Twilight Hour" is told by the male protagonist. This is translated by Rupanjali Baruah. In the twilight of their lives, she tells him: "How could I tell you that I would slowly turn a cripple, I would have been a nightmare in the foundation of your dreams. Now that I have found you again, this waiting for death does not bother me."

This is a stirring romance that moves one to tears!

"The Protectors" by Lakshmi Nandan Bora is translated by Samudra Gupta Kashyap.

Sompaguri is a well-knit village. People are honest. There are no thieves amongst the residents. The Government decides to open a 'thana' to protect the village. The villagers are amused. Do they need one? They think, they do not, but the establishment thinks, they do. Several incidents prove the mighty power of the police, even when they are caught. A tale so common!

"Audition" by Mahim Bora is translated by Bibhash Choudhury. The voice of Prafulla was such that it could drive his mother crazy. He however harboured the secret desire to go on air so that his voice would create sound waves in the air across the universe. Through the power that his friend wielded in the radio station he is almost successful.

"On the death of an elephant" by Nirad Choudhury is translated by Madhobi Medhi. An elephant and two men die in a train accident. The hue and cry is about the death and stench of the elephant lying on the road. While all passers by block their noses against the foul smell emanating from the elephant, the writer notices that one woman, not quite conscious of the stench, gazes at the site through the racing bus. In her daze at losing her husband, the writer volunteers to help mother and son catch the right bus back to their village. Her son divulges to the writer that even his father, the mahout, died with the elephant. The writer is perturbed at the inhumanness of people. While all pros and cons were discussed about the elephant, the writer wonders, why there are not thoughts about the two men who also died. Have we lost heart!

"The Crucifixion" by Nirupama Borgohain is translated by Pradipta Borgohain. Fear among the labour class, should they divulge their religious affinity to lose their source of income, is a theme of the story. This and much more is there for the reader to realize that trepidation runs through their veins, considering the fact that there are opposing forces that the administration craves to torture and terrorise, and vice-versa.

"Moina" by Sarat Chandra Goswami is translated by Gayatri Bhattacharya. Narrated by the protagonist, she has revenge on god. He took away her baby son. To drown her loneliness, while he is away at work, one day, he brings her a myna in a cage. She teaches 'Moina' to talk, and one day her happiness is short lived as god takes away her 'lord'. Back with her parents, her only company is her beloved 'Moina'. But then god seems to be unkind to her, as her 'Moina' succumbs to a poisonous sting. Her revenge against god lives with her.

"Lost" by Saurabh Kumar Chlikha is translated by Meenaxi Barkotoki. A missing link within the self, a realisation that one's creative potential often de-links one from reality, is portrayed as the author is perplexed at the tune that repeatedly recurs softly from the bottom of his heart.

"Disease" by Sheelbhadra, translated by Surajit Barooah, reads as: A mere incident is just news to the unaffected, but to the affected it is a life-long experience of torment, especially when the breadwinner dies, and his family is in the quagmire of poverty and sickness.

This is all the more poignant in a conflict-borne area. The reasons for disappearance of individuals are often never questioned. The petrified nerve of society is silently stomached - insensitive to normal happenings.

The pain endured by Pradeep Mahant's mother at his disappearance, evolves across time. So much so, when consoled about her son's vanishing, by that time she has lost memory of his very being. When the writer visits her and asks her "Won't Pradip be upset if he sees you lying around like this?", her answer is "Pradip? Who's he? Whom are you talking about?"

"The Decision" by Syed Abdul Malik is translated by D.N. Bezboruah. Conscious awareness of her responsibility to educate her two brothers and nurse her sick mother leads Aimoni to decide not to take the vow of matrimony. Having fulfilled her tasks, her life enters the next phase. Caught between the proposal for marriage from an affluent bachelor and the sobriety of a widower with two children, she opts for the widower, because of her affection for his children.

The anthology is an imaginative mix of themes any reader could relate to. It is universal in nature, considering the fact that many of these stories could happen in any geographical locale, setting apart its socio-cultural nuances.

This could be an excellent 'text' for a course in Language and Literature.

The writers could have added explanations or meanings of some more cultural key concepts that occur in the stories.

BRAIN AND LANGUAGE (Seminar Proceedings)

P.A. Suresh, Annie Monsy & S. Maya (Eds.)

1994, HB, Demy 1/8, pp. xiv+214, Rs. 275/- (US\$ 75/-)

A compilation of 7 papers on various aspects related to the connection between brain and language. The papers deal in depth with the study on how brain damage can disrupt the use and system of language functioning in children as well as in adults and looks at unique opportunities to find out more on the anatomo-physiological organization of the human brain, and in identifying the physiological components in the mental processing of language.

CALDWELL AND A.R. RAJA RAJA VARMA ON MALAYALAM GRAMMAR

K. Raghavan Pillai, 1996, Demy 1/8, pp. 168, Rs. 250/- (US\$ 25/-)

A comparative study of the views of two prominent grammarians, this work attempts to compare the views of Caldwell and Rajaraja Varma (A.R.) on Malayalam, its relation with Dravidian in general and Tamil in particular. The work aims to analyze critically the introduction (*Pīṭika*) by A.R. to *Kēraḷapāṇinīyam*, vis-a-vis an evaluation of Caldwell's views on Malayalam grammar and its development. The discerning critic will find this work informative and stimulating.

EARLY INSCRIPTIONAL MALAYALAM

K. Retnamma, 1994, Demy 1/8, pp. 326, Rs. 350/- (US\$ 35/-)

A data-oriented report, this book containing 45 inscriptions belonging to I-IV-century Kollam era, focusses on the origin and gradual development of Malayalam language during subsequent centuries. Historians and linguists will find this analysis helpful in outlining the early period of Malayalam language.

Review

AN INTERNATIONAL BIBLIOGRAPHY OF DRAVIDIAN LANGUAGES AND LINGUISTICS. Vol. 6: THE TRIBAL AND MINOR DRAVIDIAN LANGUAGES AND LINGUISTICS. L.S. Ramaiah & B. Ramakrishna Reddy (Eds.). 2005. Chennai: T.R. Publications. Pp. lli + 204. Rs. 650/- (US\$ 60/-).

Reviewed by

B. GOPINATHAN NAIR

The Tribal and Minor Dravidian Languages and Linguistics is the sixth and last volume of the series, *An International Bibliography of Dravidian Languages and Linguistics*, compiled by the Editors L.S. Ramaiah and B. Ramakrishna Reddy. Volume 1 deals with General and Comparative Dravidian Languages and Linguistics followed by those of the respective languages, viz. 2. Tamil, 3. Telugu, 4. Kannada and 5. Malayalam.

Compilation of a subject bibliography is an adventurous enterprise that implicates professional expertise of the concerned subject specialist and that of the library and information scientist. The present volume on Tribal and Minor Dravidian Languages and Linguistics fulfils this condition. It contains a forward by P.S. Subrahmanyam, a noted Dravidianist, a general introduction by Ramaiah, an experienced scholar in Library and Information Science, a specific introduction by B. Ramakrishna Reddy, the subject expert and series Editor who has got extensive field experience on some of the tribal Dravidian languages like Maṇḍa, Indi-Awe etc., acknowledgments, list of abbreviations, bibliographical information pertaining to 21 Dravidian languages, 16 speeches / dialects comprising 1,800 serially numbered entries ending with scholar and subject indices confined to 204 pages. Ever since the first volume appeared in 1994, nearly a decade has elapsed to see the present one in print.

Among the languages included here except Kodagu and Tulu, the rest are tribal languages. The title implies that Kodagu and Tulu which are non-tribal languages are included in and divided by the words minor and tribal Dravidian languages whereas the rest of the languages are covered by both terms.

Reddy's chosen introduction, 'Studies on Tribal and Minor Dravidian Languages', adapted here is a revised and enlarged version of his earlier paper, 'Dravidian Tribal Language Studies since Caldwell' appeared in *IJDL* Vol. 30.2 (2001) which is a fitting contribution to this volume. It overviews the works of the European missionaries, the precursors of Robert Caldwell, and the latter's pivotal work in 1856 representing the 19th century contribution which he christens as the Caldwell period followed by those of the Linguistic Survey of India period 1900-1950 and the discovery and description of the new tribal languages based on fieldwork, i.e. the modern period 1950-2000. He considers the number of present-day Dravidian languages to be around 25 to 30 and enumerates the languages under the generally followed four-fold subgroups proposed by Bh. Krishnamurti, viz. SD, SCD, CD and ND.

Among the tribal dialects, Yerukala, Muḍuga and Kāḍar are considered as dialects of Tamil; Kurumba and Aḍiya as dialects of Kannada; Paṇiya, Muḷlu Kurumba and Urali are treated as dialects of Malayalam; Koya as a dialect of Kolami and Kisan as a dialect of Kurukh. The language or dialect status is not yet clear for Kasaba and Indi-Awe. He further states that scientific methods have to be evolved and applied to solve this intriguing problem, which has direct bearing on the number of Dravidian languages (p. xxi).

It is true that there can be differences of opinion regarding the assignment of dialect status to some of these speeches to one or the other languages or as admixtures of languages and dialects, especially with regard to the Kerala tribes. After going through the available materials on some of the Kerala tribes, it seems that the speech of Aḍiya, Aranadan, Kurichiy, Mala Muttan, Malavēḍa, Mannan, Kāṇikkār, Kāḍar, etc. can be treated as dialects of Malayalam, Muthuva as admixture of Ta. Ma., Urali (Ta. Ka. Ma.), Muḍuga (Ka. Ma. Ta.), Yerukala (To. Ta. Te.), Yerava (Ma. Aḍiya. Paṇiya), etc. All these are tentative subject to detailed comparative study.

Reddy is right when he says that after reading through the published works, one wonders whether any speech forms of Kerala tribes can

deemed as a distinct language. He has also stressed the need for rigorous fieldwork in South India, especially Southern Tamil Nadu including Nilgiri and the whole State of Kerala (p. xxxiii). This would eventually give a clear picture about the language vs. dialect status of nearly 48 tribal speech communities reported in Kerala.

Besides, he mentions the scope of tribal Dravidian speeches in the study of diverse branches of linguistic endeavour, viz. comparative linguistics, dialectology, language contact and convergence, typology, sociolinguistics, lexicography, etc. and eventually points out the relevant areas of research desired for unfolding the social, cultural and linguistic aspects of the tribal communities.

In short, his views, insights and approach in depicting the growth and development of Comparative Dravidian Linguistics as well as the studies on various aspects of Dravidian tribal languages and dialects during the past two centuries and the problems and prospects of future studies envisaged in this area are unbiased as could be gleaned from several statements and presentation of information on authors and their works.

A quick browsing of the volume, however, has encountered a few undernoted discrepancies and misprints.

1. A short introduction provided for each language prior to the listing of bibliographical information is a welcome feature as it would be useful for beginners who want to gather some preliminary information about the tribal Dravidian languages and dialects. However, it is not uniformly carried out in the case of Miscellaneous Speeches under Part 3 where among 16 dialects, brief descriptions were given only for six, which may be due to the non-availability of ready information to the author but they are available in the Department of Linguistics, University of Kerala and in the I.S.D.L.
2. Among the 16 speeches or dialects shown on p. viii under the subhead Miscellaneous cf. Sl. No. 5 Devikulam. Here, instead of Devikulam which is a taluk in Idukki District of Kerala, Mannan that represents the name of the tribe and his dialect should be given since all other 15 names mentioned therein refer to the tribal communities and not the settlements. The Mannans, a hill tribe of Kerala, are found in the forest areas of Devikulam, Thodupuzha, Udumpanchola and Peermade taluk of Idukki district. Besides, two other prominent tribes, viz. Muthuva and

Urali, are also inhabitants of this region. Cf. p. 171, Sl. No. 1693: Joseph, Annie, 'Description of the tribal dialect of Devikulam' (Ph.D. Thesis), Kerala University, 1983. It seems that Devikulam is taken from this context. However, only Mannan dialect is dealt with in this thesis.

3. Malayaslans (Veda), shown on p. viii, Sl. No. 11, is a misprint. On p. 176, it is shown as Malayalans (Veda), which is correct. They are generally called as Vedas besides Malavedas. Most of the work on this tribe was conducted in the Department of Linguistics, University of Kerala.
4. *Abbreviations*: IJDL - Indian Journal of Dravidian Linguistics (cf. p. li). Indian should be read as International.
5. ISDL - Indian Society of Dravidian Linguistics (p. li). Indian Society to be corrected as International School.
6. Gopinathan Nair, N (cf. Sl. No. 0072, p. 9 & p. 187). N to be corrected as B.

A bibliographical work of this kind cannot be complete and exhaustive at any point of time, since several people are working in tribal Dravidian dialects in a modest way and all their research findings have not appeared in print and hence not easily accessible. However, as rightly pointed out by Reddy, a survey of the type undertaken by him would provide the necessary impetus for further research on the study of tribal Dravidian languages and dialects.

This volume dedicated to Prof. M.B. Emeneau on his birth centenary is a befitting memorial to the great savant in Dravidian and tribal languages and Linguistics. The Editors deserve appreciation for bringing out this elegantly executed book of bibliography, a useful and essential tool for the researchers in Dravidian languages and Linguistics. An easily accessible online version would be most welcome.

OBITUARY OF M.B. EMENEAU

WILLIAM BRIGHT

University of Colorado

Murray Barnson Emeneau died peacefully at the age of 101 at his home in Berkeley. Perhaps the last surviving student of Edward Sapir, he was the principal founder of the Linguistics Department at his university and of the Survey of California Indian Languages. He was known as a Sanskritist, as the world's most distinguished scholar in the Dravidian language family of India, and as the 20th century's principal exponent of the concept of "language area", in India and internationally.¹

1. Overview

Emeneau was born on 28 February 1904 in Lunenburg, Nova Scotia. In high school he studied Latin, Greek and German, and distinguished himself so much that he obtained a four-year scholarship at Dalhousie University (in Halifax, N.S.), where he continued his classical studies. The continuing excellence of his performance won him a Rhodes Scholarship to Balliol College, Oxford University. From there he went in 1926 to Yale University, with a teaching appointment in Latin; but at the same time he began to study Sanskrit and Comparative Indo-European with Franklin Edgerton and Edgar Sturtevant. His 1931 dissertation was on Sanskrit, and Emeneau was by this time a committed indologist.

With jobs scarce during the depression, Emeneau stayed on in New Haven, surviving on small research fellowships and attending additional classes - crucially, those of Edward Sapir, who was by then teaching 'the new linguistics' at Yale. As Emeneau wrote (1980:352),

I was exposed to methods of fieldwork on non-literary languages, including intensive phonetic practice and analysis of material, but

1. In this article, as throughout Emeneau's works, the term **India** and its derivatives refer not only to the present-day Republic of India, but also to the Indian subcontinent. Note that one of his collections of papers (1980) was published jointly by Stanford University Press and the Linguistic Research Group of Pakistan. A large part of the biographical data below is based on three autobiographical statements written by Emeneau himself (1980:350-54, 1988d:406-9, 1991).

especially to Sapir's approach to anthropological linguistics, in which language is only part of the total culture, but a most important part, since in it the community expresses in its own way, 'verbifies' its culture.

But Leonard Bloomfield, whose book *Language* was published in 1933, was a presence on the Yale campus at the same time; and it was the school of structural linguistics founded by Bloomfield that became the model for Emeneau's later teaching, and for his descriptive work in Indic and Dravidian linguistics.

Another significant influence was Philip Kahclamat, a Wishram Chinook speaker brought by Sapir from Oregon; as Emeneau later wrote (1991:94-95), 'what I learned [from Kahclamat] about massive consonant clusters rid me of any inhibitions I might have had when I came to deal with similar material in the Toda and Kota languages of South India.' In later years, Emeneau was fond of citing Wishram forms like /ltpkt/ 'they are coming this way from the water'.

By 1935, with no job prospects in the US for the anthropological indological linguist that Emeneau had become, his teachers raised funds to send him to India for three years. Sapir specifically recommended that he study Toda, a little-known 'tribal' language of the Dravidian family, spoken in the Nilgiri Hills of South India; and Sapir specifically suggested that this might lead to a study of comparative Dravidian. Emeneau in fact did major fieldwork on four Dravidian languages during this period - Toda, Kota, Kodagu (Coorg), and Kolami, as well as briefer work on Badaga and Brahui - and comparative Dravidian was indeed the field in which he was to become a world leader.

After teaching linguistics at Yale for a year, Emeneau was hired in 1940 as Assistant Professor of Sanskrit and General Linguistics at Berkeley. (In 1941 he became a U.S. citizen.) He rose to full Professor by 1946, and retired to Emeritus status in 1971. He was Chair of the Linguistics Department from 1953 to 1958, and of the Classics Department from 1959 to 1962. In 1948, when I first became his student, he was regularly teaching the undergraduate courses in General Linguistics, Phonetics and Phonemics, Morphology and Syntax, Comparative Indo-European, and Sanskrit; he also had a course in the Classics Department entitled simply 'India'. Among the academic honours that he won were the presidency of both the Linguistic Society of America and the American Oriental Society;

two Guggenheim fellowships; election to the American Philosophical Society and the American Academy of Arts and Sciences; and honorary doctorates from the University of Chicago, Dalhousie University, the University of Hyderabad, and Kameshwara Singh Darbhanga Sanskrit University in Bihar, India.

Emeneau had the pleasure of seeing four collected volumes of his published essays: one of his papers on language and linguistic area (1980); one of his Sanskrit studies (1988a); and two of his Dravidian studies (1967, 1994). Three collections of papers were dedicated to him: one of articles on California Indian languages (Bright 1964); one published in India in honour of his *ṣaṣṭipūrti* '60th birthday' (Krishnamurti 1968); and one devoted to *Dravidian phonological systems* (Schiffman & Eastman 1975). In 2004, a group of papers in his honour were delivered at the 32nd All-India Congress of Dravidian Linguistics held at Warangal, Andhra Pradesh; and these were published as *International Journal of Dravidian Linguistics* 34:2 (2005). This issue also includes an updated bibliography of Emeneau's publications (Reddy & Reddy 2005). At the beginning of 2005, the 'Prof. M.B. Emeneau Centenary International Conference on South Asian linguistics' was held at the Central Institute for Indian Languages in Mysore (the program and abstracts are available as http://www.ciil.org/announcement/MBE_programme); several papers deal specifically with Emeneau's work. Later in 2005, the guesthouse at the new Dravidian University in Kuppam, Andhra Pradesh, was named Emeneau House.

Throughout his teaching career at Berkeley, and long into his retirement, Emeneau continued prolific research and publication on both Sanskrit and Dravidian - from philological, historical, descriptive and anthropological viewpoints. A little-known aspect of his tenure at Berkeley is that, during the war years of 1943-44, he researched and taught the Vietnamese language for the Army Specialized Training Program; this later resulted in several publications on the Vinh dialect (1945, 1957b, 1951).

Emeneau died peacefully on 29 August 2005, survived by his beloved stepdaughter Mrs. Phyllis Savage, of California. He has been buried next to his wife and family in Nova Scotia. His papers are now in the custody of the Bancroft Library, University of California, Berkeley.

2. Contributions to Sanskrit Studies

Emeneau's 1931 doctoral dissertation at Yale was a critical edition of the *Vetālapañcaviṃśati* ('Twenty-five tales told by a vampire') by Jambhaladatta.

Expanded and published in 1935, this work foreshadowed a continuing series of literary and philological studies, many of them focused on the *realia* of ancient Indic civilization, e.g. 'The strangling figs in Sanskrit literature' (Emeneau 1949) and 'The composite bow in India' (1953). Franklin Edgerton's interest in the folktale tradition of India, reflected in Emeneau's dissertation, was reflected in such publications as the series 'Studies in the folktales of India' (1943a-b, 1947a); in these works, Emeneau juxtaposed types of Sanskritic and Dravidian narratives, looking toward his later view of India as a cultural and linguistic area. A more purely literary work was his annotated English edition of Kālidāsā's famous play *Śakuntalā* (1962).

Throughout his career as a Sanskritist, Emeneau also produced works of a more strictly linguistic nature. A memorable paper, applying the rigorous structuralism that he had learned from Leonard Bloomfield, was his article on 'The nasal phonemes of Sanskrit' (1946). A more pedagogical work, but one unforgettable by Emeneau's Sanskrit students, was his booklet *Sanskrit sandhi and exercises* (1952). It should also be mentioned here that, once he had added Dravidian linguistics to his qualifications, he often explored Sanskrit etymologies in terms of possible Dravidian origins, as in his papers 'A Dravidian etymology of the Sanskrit proper name Nala' (1943c) and 'Some Indian etymologies' (1958).²

Prof. Ram Karan Sharma, who received his doctorate in Sanskrit at Berkeley under Emeneau's direction (and is now a member of Kameshwara Singh Darbhanga Sanskrit University), has written an eloquent eulogy of his teacher (translation by George Hart). The English translation is as follows:

"Indo-European and Dravidian learning are grieving in unremitting darkness even though the sun has risen. What can this dark be that flows around us? Where has that great one gone, he who would smile, his mind kindly, his heart pure?

They are fortunate, they who are where he is, but we are desolate.

His wealth was the study of the sage Pāṇini,

his wisdom the churning of the great ocean of the *Tolkāppiyam*.

He was the foremost of the wild geese that live on the lake Mānasa
that represents the wisdom of learned men - where is he now?

2. A recent summary of Emeneau's contributions to Sanskrit studies is Ananthanarayana 2005.

Wherever he may be, great-hearted Emeneau our guru,
 may he, the best of the wise, attain unending peace.
 - So speaks his circle of students, overcome by grief."

3. Contributions to Dravidian Linguistics

In addition to his work on Toda, Emeneau devoted his years in India to the study of other unwritten languages, especially Kota, a neighbour of Toda in the Nilgiri Hills; Kolami, in Madhya Pradesh; and Kodagu (Coorg), now in Karnataka state; he also did briefer work on Badaga, in the Nilgiris, and on Brahui, in Baluchistan. The first major publication resulting from this fieldwork was his *Kota texts*, in four volumes (1944-46), which also included a substantial structural sketch of the language and folk-tale analyses by Stith Thompson; the work won the praise of reviewers as diverse as Zellig Harris and Clyde Kluckhohn.

The year 1955 saw the publication of Emeneau's *Kolami: A Dravidian language*. Although based on only six weeks' fieldwork, this volume provided a rather detailed grammar plus a 112-page etymological vocabulary, with cognates from all the literary and non-literary languages known to Emeneau at the time. This was, in fact, a trial run for his magnum opus, co-authored with Prof. Thomas Burrow of Oxford University: the *Dravidian etymological dictionary* (DED, 1961; revised second edition, DEDR, 1984b). Rather modestly hidden in the introduction (1984b:xii-xiii) is a table of 'phonetic correspondences' and reconstructed proto-phonemes. This path-breaking work contains some 5600 etyma (in the revised edition), plus 309 pages of indexes (in English and 62 other languages). Although Burrow and Emeneau were better qualified to make proto-Dravidian reconstructions than most users of the dictionary, they showed a certain caution and conservatism which allowed them to reconstruct proto-phonemes, but not proto-words. This did not detract from their accomplishment; DED(R) was a magisterial work, launching a new era in Dravidian linguistics. In subsequent years, Emeneau continued innovative research on comparative Dravidian; an example from his later years is 'Proto-Dravidian *c and its developments' (1988b).³

Recent summaries of Emeneau's work in comparative Dravidian are given by Krishnamurti 2005, by K.N. Reddy 2005, and by Bh. Krishnamurti in an obituary to appear in the *Journal of the American Oriental Society*. The Burrow-Emeneau *Dravidian etymological dictionary* is specifically discussed by Gopinathan Nair 2005 and by Subramoniam 2005.

One of Emeneau's earlier publications, based on his field work in the Nilgiris, was a study of the vowels of Badaga (1939), in which he reported a typologically very unusual feature: a three-way contrast of non-retroflexed, half-retroflexed, and fully retroflexed vowels. This feature was called into question by some subsequent workers on Badaga; but phonetic fieldwork by Peter Ladefoged, decades later, confirmed that the contrasts of vowel retroflexion, though then obsolescent, were nevertheless a reality (Ladefoged & Maddieson 1996:313-14).

4. Work on Toda

Emeneau's fieldwork with the Todas, apart from its contribution to his studies in historical Dravidian, clearly constitutes the centrepiece, in three volumes, of his descriptive research in India. The first of these major works to be published was *Toda songs* (1971) - not an ethno-musicological study (no musical notation is presented), but rather a presentation of 260 song texts, with translations, ethnographic commentaries, a concordance, and indices (in a monumental volume of 1004 pages!) The second work is *Ritual structure and language structure of the Todas* (1974), an intensely detailed study of the type that would later be called sociolinguistic, with concentration on the onomastics of human beings, buffaloes and sacred sites.

The third volume on Toda is Emeneau's *Toda grammar and texts* (1984a). With this work, we begin to appreciate fully his achievement in revealing the complexity of Toda phonology - 8 vowel phonemes, long vs. short, and 37 consonants (contrasting in dental, alveolar, and retroflex positions), and in particular the value of his experience, under Sapir at Yale, with the formidable consonant clusters of Wishram Chinook: examples of Toda word-final clusters are /mutʂn/ 'grasshopper', /kodds/ 'wasp', and /monkyn:/ 'ruby'.⁴ Although Emeneau never published dictionaries of Toda or of Kota as such, the English index to *DED* provides access to the vocabularies of both languages.

5. Contributions to Folklore

In the Boasian and Sapirian model of fieldwork in which Emeneau was trained, the collection of oral literature texts and their analysis as

4. A recent extension of Emeneau's work on Toda is Subrahmanyam 2005.

folklore were considered an inherent component of linguistic work.⁵ Accordingly, as a product of his study in India, Emeneau published a major collection of Kota texts (1944-46); a sampling of Kolami folk-tales (1955:164-71), and for Toda, apart from songs, no less than 194 texts, with references to the folkloristic literature (1984a:191-408). Several articles by him discuss the occurrence of particular folklore motifs in Sanskrit and in modern languages of India; an example from recent years, is 'Kṛṣṇa steals the gopī's clothes' (1989).⁶

6. Contributions to Areal Linguistics

Regarding the period of his fieldwork, Emeneau wrote (1991:98):

It was soon brought forcibly to my attention that in spite of many local divergences there was an underlying unity, in the anthropological sense, of all Hindu India. It began to become clear to me also that Jules Bloch's (and others') suggestion that there was some degree of linguistic unity in the whole of the subcontinent, no matter what the language family with which one was specifically dealing, was in principle correct I began already in my paper on Toda echo-words published in 1938 to make detailed investigation of pan-Indic linguistic features, though it was only in 1956 that I collected all that I then knew on the Indian linguistic area and used and defined the term. The concept (that of the 'Sprachbund') had already been investigated for other areas but India had been for all practical purposes neglected before my work.

This highlight of Emeneau's ground-breaking work in Dravidian and Indo-Aryan comparative studies is the concept of a 'linguistic area', defined by him as a geographical area wherein languages belonging to two or more families have traits in common that do not belong to the other members of at least one of the families. The term had been used before by H.V. Velten, N. Trubetzkoy and R. Jakobson; but the concept was given new life in Emeneau's classic article 'India as a linguistic area' (1956).

To quote Dil (1980:xiv):

5. It is worth recalling that Franz Boas was editor of the **Journal of American Folklore** from 1908 to 1924.

6. A survey of Emeneau's work on folklore has been published as N.B. Reddy 2005.

Subsequently [Emeneau] added further theoretical and methodological dimensions to the concept in a series of papers on linguistic and sociolinguistic phenomena found across dialects, languages and language families in South Asia. Throughout this work he [was] particularly sensitive to the historical facts and sociolinguistic issues behind questions of phonological, morphological, syntactic, and semantic development. The effect of this comprehensive approach to understanding the processes of language and culture contact has been to add a new dimension to our awareness of the historical interdependence of world society.

As Emeneau himself wrote (1991:98), 'This was essentially an injection of ethnological thinking into diachronic linguistics.'⁷ His broader influence in the concept of linguistic area can be seen, e.g., in the renewal of interest among Americanists in areal linguistics, as in the work of Haas (1976) and Sherzer (1976).

Emeneau's personal feelings for the South Asian peoples and culture were clear; to put it briefly, the man loved India. As he wrote (1980:353),

Certainly the [fieldwork] experience of 1935-38 made me feel that *Indiae nihil a me alienum puto*. It gave me a curiosity about all facets of Indian life, and the assumption (which perhaps indeed presumption) that I should not hesitate to publish anything that I might discover, whether Sanskrit, Dravidian, literary, linguistic, ethnological, folk tale, or any combination of any of these. If generalism is not too fashionable, it certainly is not far from the practice of my teachers, or, perhaps more pertinently, from the practice of such pioneers in the study of India as Sir William Jones Much of the new Indology since the middle of the century is pioneering, and I feel proud if I have been able to accomplish a little in this spirit.

To quote him further (1991:96-97):

I was able to travel widely and experience such delightful things as the temples of Tamil Nadu and of Orissa, the temples and Jain monuments of Mysore and the Maharaja's dasahara, the Mogul and other monuments of Delhi and Agra, the caves and paintings of Ajanta and Ellora, the great cities of Banaras, Bombay, Calcutta, and

7. Recent work on areal linguistics in Central India has been published by B.R. Reddy 2005.

Madras, the fiery curries of the South and the brahmans' fish curries of Bengal My broad background led me to take a holistic view of India, in which everything was of interest and was, so far as it was possible, fitted into the one large picture.

7. Contributions to American Indian Linguistics

Emeneau did not publish on American Indian linguistics as such, but his involvement in the field is attested by two published items (as well as in the memories of his students). He was active in organizing the Symposium on American Indian Linguistics that was held at Berkeley in 1951; and in his introduction to the papers from that meeting (published 1954), he indicated the thinking that was going into the formation of the Survey of California Indian Languages (later renamed the Survey of California and Other Indian Languages):

The Symposium as a whole can be regarded as programmatic The programmatic needs most stressed are those of description before it is too late - and then comparison based on description. The great days of the collection of descriptive data were, without question, those of Boas, Sapir, Michelson, and Leonard Bloomfield. Those days are gone - for the moment at least. World War II has intervened and has to some extent shifted geographical interests. There has intervened too the great refinement of methodology initiated by Sapir and Bloomfield. The need for the collection of American Indian descriptive data, however, still remains The refinement of methodology also demands that some, though not all, work be redone or at least retouched, with new fieldwork usually a desideratum More description, then, must for the time being remain the great need in American Indian linguistics

Many years later, in the 1997 memorial collection for Mary Haas (p. 618), Emeneau recalled the events of the 1950-s:

Alfred L. Kroeber and some anthropological colleagues had long before done much work on Californian Indian languages, but some time before the thirties and forties, Kroeber's interest had been diverted to more strictly ethnological matters. New practitioners of linguistics had come to the campus, but the subject had not yet achieved organization The post-war GI Bill brought expansion to Berkeley We found that by joining forces informally with others

interested in linguistics, we could offer instruction and degrees in linguistics. An offer from Yale (for myself) triggered the decision at Berkeley to regularize the linguistics program. In the early fifties, a department was created, and, with Kroeber's active support, the Survey of California Indian Languages was set up, with Mary [Haas] as director, and funded to allow students to do fieldwork, to write dissertations, and, aided by the University's publication policies, to publish accounts of these Indian languages.

The results have been abundant and have had a strong impact, on both Americanist and general linguistics. Emeneau's influence was also acknowledged by a volume on California Indian languages dedicated to him (Bright 1964).

8. Contributions to Anthropological Linguistics

Emeneau had, to be sure, a background in classical philology; but more important, he was a student of Edward Sapir, who was as brilliant an anthropologist as he was a linguist; furthermore, Emeneau worked in the Nilgiris with the anthropologist David Mandelbaum, who had also studied under Sapir. Indeed, an important part of Emeneau's work with the Toda and Kota was explicitly ethnographic. Throughout his career, then, Emeneau was in the main stream of American anthropological linguistics, continually pointing up the position of language as a part - and, indeed, a crucial part - of culture as studied by the anthropologist. His bibliography includes a valuable group of papers expanding and amending the classic ethnography of the Todas by Rivers, as well as several original contributions to the ethnography of the Kota and the Coorgs. On a more general level, his Presidential Address to the Linguistic Society of America, published as 'Language and non-linguistic patterns' (1950), must be mentioned as a study of equal relevance to anthropology and linguistics, and as a forerunner of the more recently flourishing field of ethno-semantics.

Finally, note should be made again of Emeneau's long-standing interest in oral literature, which has resulted in a long list of publications. As he wrote in connection with the Toda (1941:158),

.... the culminating item of value that the linguistic student can give to ethnology is the study of a community's most highly verbalized cultural manifestations It is here, in their verbal art forms, stories, songs, oratory, or the like, that the members of the culture give the

most overt and self-conscious expression to the patterns which they follow or profess to follow in their life.

This vision of the integration of folklore, linguistics, and ethnography, maintained by Emeneau for years, was notably avant-garde, and is being pursued with increasing vigour at the present day by students of linguistic anthropology.

Related to Emeneau's work on oral tradition was his concern for varieties of linguistic play, especially the so-called 'echo-words' which are widespread in India; we can recall his papers 'An echo-word motif in Dravidian folk-tales' (1938), 'Annamese, Arabic, and Panjabi riddles' (1945) and 'Homonyms and puns in Annamese' (1947b). Another form of language play is studied in his 'Joking relationships in India' (1992).

An interest in onomastics - surely a neglected topic within anthropological linguistics - was represented by Emeneau's detailed study of Toda names in his *Ritual structure and language structure of the Todas* (1974), but also in his 'Personal names of the Coorgs' (1976) and 'Towards an onomastics of South Asia' (1978).

In February 2004, colleagues of Emeneau at Berkeley organized a 'Symposium on the ecology of language and a celebration of the 100th birthday of Murray Emeneau'. I quote from the program:

Language ecology is a multidisciplinary study of how languages develop, spread, interact and decline as part of socio-cultural, political and environmental processes Language-based and language-related phenomena including folklore and music are also part of this ebb and flow and mixing that has taken place throughout human history This symposium on language ecology is dedicated to Murray B. Emeneau, an early and influential leader in language ecology, in honour of his 100th birthday.

9. Personal Views

Part of my heritage from studying with Emeneau was that he identified himself as a student of Sapir, as regards the relationship of language to the rest of culture; but he taught introductory linguistics not from Sapir's *Language* (1921), but from Bloomfield's *Language* (1933) -

which, for him, represented the 'dominant paradigm' of the day.⁸ A quote from Emeneau is appropriate (1991:95):

[The period 1931-35] was the period when Sapir and Leonard Bloomfield were developing and using the methodology of the phoneme It was the two teachers, Sapir and Bloomfield, from whom I learned the 'modern' linguistics of the 30s - from Sapir in person as a teacher, and from Bloomfield's writings and later informal contacts. Much has been made of these two men, as if they were poles apart, and of course they were so, temperamentally and in style. But at bottom they followed the same method in handling the basic material of language, i.e., what is said, which is, in my opinion, what linguistics is about. Richard Handler has said that Sapir inculcated in his pupils 'the passionate analysis of linguistic forms'. So he did, but so did Bloomfield, and to that extent I feel myself a pupil of both men What Sapir gave me (to which I think Bloomfield contributed not at all), was a sense of language as man's culminating cultural experience. When I encountered the Todas, whose chief and all-absorbing aesthetic experience was their extempore songs sung on all cultural occasions, I knew that it was that that Sapir was talking about, and his teaching led me towards copious recording and subsequent analysis.

Although Emeneau and Bloomfield were contemporaries at Yale, little has been written about their relationship. However, in his published note on 'Bloomfield and Pāṇini', Emeneau wrote (1988c):

How did [Bloomfield] gain his knowledge of [Hindu grammar]? I regret that I never asked him about it. He would surely have been quite open about it, as he was in his remark to me that Pāṇini was one of his bedside books

Certainly Emeneau himself was fond of referring to the predilection for brevity in the works of the ancient Hindu grammarians; he often quoted the Sanskrit saying that 'The grammarian values the saving of half a short vowel over the birth of a son.' He also liked to note the succinctness of the last *sūtra* in Pāṇini's grammar, *a a*; this rule was to be later interpreted in terms of generative phonology as [V, +low, +back, -round, -long] >

8. When I took a reading course in descriptive linguistics from him in 1949-50, we discussed papers by Bloch, Hockett, Harris and Wells: not a bad preparation for the 'formalist' style of generative linguistics in later years.

[+high] (i.e. short /a/ > [']), and echoed in the famous last rule of Chomsky and Halle's *Sound pattern of English* (1968:245) as [V, -stress, -tense] > ['].

Another quotation is relevant. Regarding his years of study at Oxford, Emeneau once wrote (1991:93):

I also had to study ancient history and philosophy, the latter mostly ancient (Plato, Aristotle), but also modern down to the English idealistic school and smatterings of Kant. The philosophy did not take - I found that though I could understand superficially what I read, I could not reproduce it except very awkwardly and could not produce an original thought of my own; the experience left me with a permanently anti-theoretical bias, inoculated against the developments in linguistics of the last three decades [i.e. 1960-90].

But this bias was of course no handicap to Emeneau in the "anti-mentalist" American linguistics of the 1930-s through the 1950-s.

Emeneau was a teacher and researcher of amazing erudition, meticulous habit and somewhat reserved demeanour (which lessened over the years). His students learned from him the meaning of professionalism in scholarship; but we were once astonished to hear him say in class, concerning a knotty analytical problem: "Oh, the hell with it! - as it were."

Yet his personal reserve was offset by the openness of his unforgettable wife Kitty.⁹ If Emeneau was a bit of an introvert, Kitty was a pronounced extrovert who brought her husband constantly into the world. She once told me that she liked to give a dinner party once a week, for colleagues and students; when one considers the additional number of dinner parties to which they must have been invited, it is clear that the Emeneaus led an active social life. They also enjoyed participating with colleagues in a play-reading group; Emeneau was especially proud of his

9. Katharine Fitch Emeneau was born in China in 1903, the daughter of an educational missionary; she married Emeneau in 1940. He dedicated two books to her: "I must thank my wife for her affectionate and sympathetic stimulation of all my undertakings" (1971:viii); "I thank with love my dear wife, whose patience and solicitude have done so much to further my labors" (1984a:4). As luck would have it, Kitty was a native speaker of the same Chinese dialect as Mrs. Buwei Yang Chao - the wife of the linguist Y.R. Chao, who was a colleague of Emeneau at Berkeley. At dinner parties, Mrs. Emeneau and Mrs. Chao often enjoyed chatting in their 'native dialect'. After Kitty's death in 1987, Emeneau lived alone in their home for the next 18 years, without a television or computer, but steadily writing and publishing, and regularly attending campus functions.

performance as Col. Pickering, 'the author of *Spoken Sanskrit*', in Shaw's *Pygmalion* (to become better known as the musical *My Fair Lady*).

As Emeneau's life extended productively into his eighties and nineties, people sometimes asked him if he attributed his longevity to diet, exercise, attitude - or what? He always answered: 'None of that; just genes'. In fact, researchers have recently pointed out that Nova Scotia - and within Nova Scotia, Emeneau's hometown of Lunenburg - produces more centenarians than any other part of North America; the cause is presumed to be genetic (Duenwald 2003).

Emeneau not only had a long life, but he continued his productivity until he was well into his nineties - to the point where his later writings include contributions to *Festschriften* in honour of his own students - in 1998 (Bright), 2000 (Lamb) and 2001 (Krishnamurti). As he observed (1998:vii-viii):

Among Indologists it is the pleasant custom to speak in the traditional Hindu way of the *guruśiṣyaparaṃparā*. That is, we trace out our place in the succession (*paraṃparā*) of pupils (*śiṣya*) and teachers (*guru*).

The respect that Emeneau unfailingly accorded to his Indian predecessors and contemporaries was especially appreciated by scholars in India.

Throughout his career, Emeneau was a "scholar's scholar"; yet he was notable for his generosity and supportiveness toward his students. His memory will continue to inspire his academic children, great-grandchildren and generations of descendants to come.¹⁰

ABBREVIATIONS

<i>BSOAS</i>	Bulletin of the School of Oriental and African Studies (University of London)
<i>IJDL</i>	International Journal of Dravidian Linguistics
<i>JAOS</i>	Journal of the American Oriental Society

10. Emeneau's last publication (2003) was a letter to the American Philosophical Society, thanking the Society for supporting his fieldwork in India and the publication of his results. My thanks for help in writing this obituary go to Charles Bigelow, Andrew Garrett, George Hart, Bh. Krishnamurti, Phyllis Savage and Ram Karan Sharma.

Lg. Language

UCPL University of California Publications in Linguistics

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* This listing does not attempt to update bibliographies of Emeneau which were published in 1980 and 1994, and most recently by Reddy & Reddy 2005. A complete bibliography is to be published by Bh. Krishnamurti in an obituary for the **Journal of the American Oriental Society**.

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